

Proceedings of the 11<sup>th</sup> International  
Adult Education Conference

14–15 December 2021  
Prague, Czech Republic

# Adult Education 2021

## – In Diverse Learning Environments

### Editors

Jaroslav Kříž  
Zuzana Svobodová





FACULTY OF EDUCATION  
Department of Andragogy  
and Educational Management  
Charles University



KATALOGIZACE V KNIZE - NÁRODNÍ KNIHOVNA ČR

Vzdělávání dospělých (konference) (2021 : Praha, Česko)

Adult Education 2021 - in diverse learning environments : proceedings of the 11th International Adult Education Conference : 14-15 December 2021 Prague, Czech Republic / editors Jaroslav Kříž, Zuzana Svobodová. -- Prague : Czech Andragogy Society, 2022. -- 378 stran  
Obsahuje bibliografie

ISBN 978-80-908330-0-5 (brožováno)

\* 374.7 \* 377 \* 005.963 \* 331.546 \* 37.0:001.895 \* (062.534)

- vzdělávání dospělých
- odborné vzdělávání
- profesní rozvoj
- profesní kompetence
- inovace ve vzdělávání
- sborníky konferencí

374 - Výchova a vzdělávání dospělých. Mimoškolní výchova a vzdělávání [22]

Proceedings of the 11<sup>th</sup> International  
Adult Education Conference

14–15 December 2021  
Prague, Czech Republic

# Adult Education 2021

## – In Diverse Learning Environments

### Editors

Jaroslav Kříž  
Zuzana Svobodová

Czech Andragogy Society / Česká andragogická společnost

ISBN 978-80-908330-0-5 (Print)

ISBN 978-80-908330-2-9 (pdf)

ISSN 2571-3841 (Print)

ISSN 2571-385X (Online)

Copyright 2022

Prague  
2022

## Conference Chair

**Prof. Dr. Jaroslav Veteška**

Czech Andragogy Society and Charles University, Czech Republic

## Local Chair

**Prof. Dr. Michal Nedělka**

Charles University, Prague, Czech Republic

**Prof. Dr. Miroslav Krystoň**

Matej Bel University, Banská Bystrica, Slovakia

**Prof. Dr. Zofia Szarota**

Pedagogical University of Cracow, Poland

**Prof. Dr. Larysa Lukianova**

National Academy of Educational Sciences, Ukraine

## Scientific Committee of the Conference

Beáta Balogová, University of Prešov, Slovakia

Silvia Barnová, DTI, University, Dubnica nad Váhom, Slovakia

Martin Bílek, Charles University, Czech Republic

Ingrid Emmerová, Catholic University in Ružomberok, Slovakia

Vladan Holcner, University of Defense, Czech Republic

Ctibor Határ, Constantine the Philosopher University in Nitra, Slovakia

Štěpán Hubálovský, University of Hradec Králové, Czech Republic

Gabriela Gabrhelová, DTI University, Dubnica nad Váhom, Slovakia

Soňa Kariková, Matej Bel University, Slovakia

Beáta Kosová, Matej Bel University, Slovakia

Slávka Krásna, DTI University, Dubnica nad Váhom, Slovakia

Miroslav Krč, University of Defence, Czech Republic

Miroslav Krystoň, Matej Bel University, Slovakia

Anna Marianowska, University of Warsaw, Poland

Marta Matulčíková, University of Economics in Bratislava, Slovakia

Marianna Müller de Moraes, Constantine the Philosopher University in Nitra, Slovakia

Milan Nakonečný, Czech Andragogy Society, Czech Republic

Michal Nedělka, Charles University, Czech Republic

Jakub Odehnal, University of Defence, Czech Republic

Aleš Olejníček, University of Defence, Czech Republic

Lenka Pasternáková, University of Prešov, Slovakia

Ivan Pavlov, Matej Bel University, Slovakia

Gabriela Petrová, Constantine the Philosopher University in Nitra, Slovakia

Beata Pitula, Silesian University of Technology, Poland

Katarzyna Potyrała, Pedagogical University of Cracow, Poland

Radomír Saliger, University of Defence, Czech Republic

Lazar Stošić, The Association for the Development of Science, Engineering and

Education, Belgrade, Serbia

Zofia Szarota, Pedagogical University of Cracow, Poland

Maroš Šip, University of Prešov, Slovakia

Viola Tamášová, CSc. DTI University, Dubnica nad Váhom, Slovakia

Jaroslav Veteška, Czech Andragogy Society and Charles University, Czech Republic

## Program Committee

Ondřej Andrys, Czech School Inspectorate, Czech Republic

Monika Davidová, University of Defence, Czech Republic

Danuše Dvořáková, Charles University, Czech Republic

Vlastimil Hubert, Charles University, Czech Republic

Milan Chmura, University of Ostrava, Czech Republic

Jaroslav Kříž, Charles University, Czech Republic

Martin Kursch, Charles University, Czech Republic

Lubomir Kubinyi, University of Defence, Czech Republic

Roman Liška, Charles University, Czech Republic

Daša Porubčanová, DTI University in Dubnica nad Vahom, Slovakia

Zuzana Svobodová, Charles University, Czech Republic

Dominika Temiakova, Matej Bel University, Slovakia

Łukasz Tomczyk, Pedagogical University of Cracow, Poland

Michaela Tureckiová, Charles University, Czech Republic

Eva Urbanová, Charles University, Czech Republic

Zuzanna Wojciechowska, University of Warsaw, Poland

Tomáš Zatloukal, Czech School Inspectorate, Czech Republic

## Reviewers

Prof. Dr. Larysa Lukianova, National Academy of Educational Sciences of Ukraine,

Ukraine Ass. Prof. Dr. Anna Marianowska, University of Warsaw, Poland

Dr. Ing. Zdeněk Matouš, Charles University, Czech Republic

Ass. Prof. Dr. Ivana Pirohová, University of Prešov, Slovakia

Prof. Dr. Maroš Šip, University of Prešov, Slovakia

Prof. Dr. Ivan Pavlov, Matej Bel University, Slovakia

Ass. Prof. Ing. David Vaněček, Czech Technical University in Prague, Czech Republic

---

# TABLE OF CONTENTS

---

<b>A MESSAGE FROM THE EDITORS .....</b>	<b>11</b>
<b>VIRTUAL CO-TEACHING IN PRIMARY SCHOOL – A CASE STUDY .....</b>	<b>13</b>
Zuzana Svobodová, Martin Kursch, Jaroslav Veteška	
<b>CURRENT CHANGES IN PEOPLE MANAGEMENT AND DEVELOPMENT AND THEIR POSSIBLE IMPLICATIONS FOR FUTURE PROFESSIONAL DEVELOPMENT PRACTICE.....</b>	<b>33</b>
Michaela Tureckiová	
<b>COMPETENCES OF THE FUTURE – NEW JOBS, NEW PROFESSIONS: FOREWORD ARTICLE .....</b>	<b>45</b>
Zofia Szarota	
<b>SATISFACTION OF HIGH SCHOOL GRADUATES WITH THEIR SCHOOL .....</b>	<b>55</b>
Roman Liška, Džalal Nazarov	
<b>CURRENT TOPICS OF PROFESSIONAL DEVELOPMENT OF ACADEMIC STAFF IN THE MIRROR OF THE ASSESSMENT OF THEIR PEDAGOGICAL COMPETENCIES.....</b>	<b>67</b>
Petr Adamec, David Kryštof	
<b>INNOVATIONS IN IN-SERVICE TRAINING OF UNIVERSITY TEACHERS IN DIGITAL COMPETENCIES.....</b>	<b>81</b>
Viola Tamášová, Silvia Matúšová, Roman Tandlich	
<b>SUSTAINABLE DEVELOPMENT AS A PART OF THE PHILOSOPHY FOR CHILDREN COURSE IN UNDERGRADUATE TEACHERS TRAINING .....</b>	<b>99</b>
Simona Borisová, Gábor Pintes	
<b>ACADEMIC STRESS IN ADULT HIGHER EDUCATION.....</b>	<b>109</b>
Jana Martincová, Iva Staňková, Michaela Bílá	
<b>NEW APPLIED APPROACHES IN OPEN PRISON IN CONVICTED REHABILITATION PROCESS .....</b>	<b>123</b>
Jaroslav Kříž, Jaroslav Veteška	

*Authors retain copyright on their authored papers.  
Please contact the authors directly for reprint permission.*

<b>IMPACT OF THE PANDEMIC ON EDUCATION .....</b>	<b>137</b>
Lenka Pasternáková	
<b>THE IMPACT OF THE COVID-19 PANDEMIC ON UNIVERSITY STUDIES .....</b>	<b>155</b>
Silvia Barnová, Slávka Krásna, Gabriela Gabrhelová	
<b>LEGAL EDUCATION OF MILITARY PROFESSIONALS AT THE UNIVERSITY OF DEFENCE.....</b>	<b>165</b>
Leopold Skoruša, Radim Vičar	
<b>READING AND DIGITAL STRATEGIES OF STUDENTS (GRADUATES) AT SECONDARY TECHNICAL SCHOOLS .....</b>	<b>177</b>
Dana Vicherková	
<b>PROMOTING SOCIAL CAPITAL AS A MEANS OF MAINTAINING MENTAL HEALTH IN SORROW .....</b>	<b>191</b>
Beáta Balogová	
<b>HISTORY INSTRUCTION THROUGH THE PRISM OF RESEARCHERS, EDUCATION POLICY MAKERS AND TEACHERS .....</b>	<b>201</b>
Jaroslav Říčan	
<b>DIGITAL TECHNOLOGIES IN THE EDUCATIONAL PRACTICE OF SECURITY ISSUES .....</b>	<b>209</b>
Miroslava Kovaříková	
<b>DESCRIPTION AND ANALYSIS OF STUDENTS' OPINIONS OF THE ETHICS OF A MILITARY PROFESSIONAL.....</b>	<b>223</b>
Miroslav Krč, Lubomír Kubínyi, Lucie Říhová	
<b>ATTITUDES OF MILITARY PROFESSIONALS TO A SELECTED ELEMENT OF FURTHER PROFESSIONAL TRAINING .....</b>	<b>235</b>
Lubomír Kubínyi, Monika Davidová, Libor Jílek, Lucie Říhová	
<b>PRISON LIBRARIES IN SLOVAKIA AS A SPECIFIC EDUCATIONAL ENVIRONMENT .....</b>	<b>247</b>
Dominika Temiaková	
<b>ANDRAGOGICAL GUIDANCE IN THE PROFESSIONAL DEVELOPMENT OF TEACHERS.....</b>	<b>261</b>
Marian Valent, Anna Pávová	

<b>EMPIRICAL ASPECTS OF EDUCATIONAL NEEDS OF HEADTEACHERS IN COMPARISON WITH ABROAD .....</b>	<b>273</b>
Mária Pisoňová, Mária Pappová	
<b>HIGHER EDUCATION TEACHER – PROFESSIONAL IDENTITY AND ANDRAGOGICAL COMPETENCIES IN THE CONTEXT OF PROFESSIONAL DEVELOPMENT .....</b>	<b>289</b>
Miroslav Krystoň, Nikola Gumanová, Zuzana Gredecká	
<b>KNOWLEDGE TRANSFER AS A TOOL FOR PROFESSIONAL DEVELOPMENT OF LEADING PEDAGOGICAL STAFF .....</b>	<b>301</b>
Eva Urbanová, Jana Marie Šafránková	
<b>ANALYSIS OF THE APPLICATION OF THE CURRICULUM STRUCTURING STRATEGY FROM THE TEACHERS' POINT OF VIEW IN THE DEVELOPMENT OF LEARNERS' CRITICAL THINKING .....</b>	<b>315</b>
Nina Kozárová, Gabriela Petrová	
<b>EDUCATION FOR CARERS OF OLDER VULNERABLE PEOPLE: SKILLS AND COMPETENCES AS KEY FACTORS IN THE PROVISION OF QUALITY CARE ....</b>	<b>329</b>
Vladimíra Dostálová, Alžběta Bártová, , Martina Pojarová, Iva Holmerová	
<b>BASES OF INTERGENERATIONAL TRAINING IN TERTIARY AND FURTHER EDUCATION .....</b>	<b>343</b>
Marianna Müller de Moraes, Ctibor Határ	
<b>CO-TEACHING IN THE EDUCATION OF PUPILS WITH SPECIAL EDUCATION NEEDS.....</b>	<b>357</b>
Wanda Tureckiová	
<b>OBSTACLES TO THE INTRODUCTION OF TANDEM TEACHING AT PRIMARY SCHOOL FROM THE PERSPECTIVE OF THE HEADMASTERS ...</b>	<b>369</b>
Vlastimil Hubert	

---

## A MESSAGE FROM THE EDITORS

---

Dear Colleagues,

We are very pleased to publish your paper in this book of proceedings. This issue covers the papers presented at the 11th International Adult Education Conference – In Diverse Learning Environments (IAEC 2021), held on 14th & 15th December 2021 in Prague, Czech Republic. This year we built on the success of the 2020 Virtual Conference and also enabled a hybrid of virtual and face-to-face presentations. The conference was traditionally organized by Czech Andragogy Society in main cooperation with Charles University in Prague. We have been working with Matej Bel University in Banská Bystrica (Slovakia) and University of Warsaw (Poland).

Charles University is the oldest university in Central Europe. The university traditionally supports and implements excellent science in the field of humanities and other sciences. The Czech Andragogy Society is the largest professional organization in the Czech Republic, dealing with the development and research in adult learning and education. The 11th edition of the conference was also strongly influenced by the ongoing Covid-19 pandemic. Therefore, most contributions reflect current education issues. The content of the book of proceedings thematically corresponds with the main topics of the conference:

- Augmented reality – co-teaching, virtual and digital competences
- New challenges for professional development
- Social capital potential
- Up-to-date educational needs in the school environment

Issues related to factors that affected both formal and non-formal education were addressed. In this collection, we present mainly research conducted in 2021, i.e. strongly influenced by the Covid-19 pandemic. The presented papers also include outputs from the research project supported by the Technology Agency of the Czech Republic, number TL03000133 New method of Education for the 21st Century: Virtual-Co-Teaching, which is being implemented at the Faculty of Education of



Charles University by the Department of Andragogy and Educational Management in the years 2020–2023.

The articles should be original, so far unpublished, and not in consideration for publication elsewhere at the time of submission. The book of proceedings is guided by its editors, reviewers, and advisory committee. This conference proceedings volume published as an e-book will be submitted for evaluation and possible coverage in Web of Science: Conference Proceedings Citation Index.

May 2022

**Jaroslav Kříž & Zuzana Svobodová**, editors  
Charles University, Prague, Czech Republic  
Czech Andragogy Society

---

## VIRTUAL CO-TEACHING IN PRIMARY SCHOOL – A CASE STUDY

---

Zuzana Svobodová, Martin Kursch, Jaroslav Veteška

### Abstract:

This paper presents the results of a partial study on the effectiveness of virtual co-teaching. The study was carried out as part of a project supported by the Technology Agency of the Czech Republic with the number TL03000133. Methodologically, it is based on a case study research design and examines the effectiveness through the perspectives of the participating co-teachers and participating students, while also reflecting the results of a knowledge test administered after the implemented co-teaching sessions. The triangulation of methods thus provides a plastic view of the effectiveness of virtual co-teaching and a basis for follow-up research in the present

### Key words:

co-teaching, teacher collaboration, virtual co-teaching, experiment, effectiveness

## 1 INTRODUCTION

Co-teaching is a broad term that encompasses the collaboration of at least two educators in planning instruction, implementing the learning process, and evaluating instruction for groups of learners (Spilková et al., 2015; Fluijt et al., 2016). Other terms describing such a learning process can also be found in practice - e.g., pair or tandem teaching, cooperative or team teaching.

The first definition of co-teaching was provided by Bauwens, Hourcade & Friend in 1989 when they defined it as "*an educational approach in which two teachers collaborate and coordinate their work to teach academically and behaviourally heterogeneous groups of students together in an integrated setting*" (p. 18). It is true that the origins of co-teaching were indeed focused on students with special educational needs, as described, for example, by Murawski (2003), who states that co-teaching is an appropriate inclusive education method for teaching students with special educational needs in



the same classroom with intact students in order to facilitate understanding of the curriculum and to implement an individualized learning approach for all. After 2000, co-teaching began to expand beyond special education, and as Murawski (2010, p. 2) states, "co-teaching helps meet the individual learning needs of all students by providing students with a teacher who is highly skilled in differentiation and individualization in addition to one highly qualified classroom teacher."

Murawski presents an interesting perspective on co-teaching when he compares it to marriage: "The concept of two equal adults involved together for an extended period of time in the education and upbringing of children, which includes their behaviour, social skills and emotional support, certainly sounds like another relationship we're all familiar with in one way or another, doesn't it?" (2010, s. 2). As Rexroat-Frazier and Chamberlin (2019) state, the key to successful co-teaching is a clearly defined purpose for co-teaching and selecting the right co-teaching partners. Furthermore, the effectiveness of pair teaching is influenced by the teaching practices chosen, the use of effective teaching strategies, and most importantly, the balance between them.

As we can see, there are many definitions of pair teaching, but every author emphasizes the word "together": there must be well-organized and constantly supported collaboration between teachers, and this means joint preparation for the lesson, joint implementation of the lesson and joint evaluation of the results of the lesson. In this case, pupils also become actively involved in working with teachers and the result is a more effective learning process.

Currently, the literature describes five to nine different types of co-teaching lessons, depending on the distribution of activities between the individual teachers, the division of roles and responsibilities of both educators. The basic types of co-teaching include the so-called tandem teaching, where both educators are equal, and the model where one teaches and the other supports. A specific form of co-teaching is the model where one teacher is essentially in charge of the lesson or using the opportunity given by the double occupancy of the lesson to divide students into groups that teach either in the same classroom or even in separate rooms (for details see Beninghof, 2012, Murawski, 2017, Dove et al., 2018, Veteška et al., 2020, Kursch, 2021).

The issue of educator collaboration is currently strongly emphasized (e.g., Novosák et al., 2021). The importance of sharing and involvement of different actors in the

educational process is also a topical issue at the level of educational policy, both Czech and European. As the text of Strategy 2030+ states, "Sharing examples of good practice is proving to be one of the most effective methods of improving the quality of the education system, and it is imperative that it is applied both across levels of education management and among teachers themselves." (Fryč et al., 2019 p. 62). Thus, to engage in collaboration and sharing of the pedagogical process among educators is an important task of contemporary pedagogy. The connection of co-teaching with the virtual component then accentuates, in addition to the mentioned collaboration, the current demand for digitalization and the overall need to respond to the current changes in society (see also Veteška and Kursch, 2019).

In the framework of the TAČR project No. TL03000133, we conducted a scoping review in 2020, where we investigated the topic of the effectiveness of co-teaching and the factors that influence it. Based on the 19 research studies analysed, we identified the core categories that influence the progress of co-teaching sessions. These were mainly the definitions of the roles of individual educators and their relationships with each other, the time devoted to preparation and the overall setup of teacher collaboration. Of course, the composition of the learners also contributed to the effectiveness of the lessons, where special attention was paid to studies describing co-teaching in the context of special educational needs. Virtual co-teaching was the subject of only 5 of the analysed studies, in which the technical aspect of the matter was repeatedly mentioned as a key prerequisite for quality education. Without a mastered and well-prepared technical support, it was not possible (regardless of the relationships and quality of educators) to provide an effective virtual teaching unit (Veteška et al., 2020). The scoping review formed the basis for our own research and allowed us to learn from the studies already conducted, thus avoiding unnecessary mistakes, and paying the necessary attention to precisely those factors that are essential for effective co-teaching.

## 2 VIRTUAL CO-TEACHING AND PROJECT INTRODUCTION

Virtual co-teaching is a newly emerging method within the project supported by the Technical Agency of the Czech Republic (TAČR). It is based on standard methods of co-teaching and extends it with a virtual component. It is a cooperation

of two educators, where one of them is always present in the class virtually. The other aspects of co-teaching remain the same, i.e., it is possible to implement different ways of it (e.g., one teach-one observe, tandem teaching or other models mentioned, also Kursch, 2021, Svobodová, 2021 for more details), it involves joint planning, implementation and evaluation of the lessons taught. It is therefore not a haphazard virtual connection of another educator, but a full-fledged component of the teaching process.

The virtual component in education is currently significant and topical not only with regard to the global pandemic of Covid-19, but also to the need to innovate methods and approaches to teaching and education and to respect the requirements arising from the concept of Industry 4.0 (e.g., Veteška and Kursch, 2019), especially the emerging robotics, automation, artificial intelligence and new technological and knowledge processes in general (Adamec, 2021). Within the project, we are testing the effectiveness of virtual co-teaching, optimizing it based on research results, and creating tools to increase the positive impact of virtual co-teaching on students. The core of the research is a controlled experiment that includes an experimental and a control group of students from the same school. In selecting them, we emphasize the equality of the basic variables (average grade, average age of the students, identical curriculum, same teacher, same expert, and other variable factors). Teaching for the control group is implemented by standard physical co-teaching, i.e., the physical presence of two educators in the classroom, while teaching for the experimental group is done by virtual co-teaching. At the end of the experiment, the results of the knowledge acquisition are tested quantitatively on the basis of a test. We complement the experiment with a qualitative investigation relying on the qualitative description method (Graneheim, Lindgren and Lundman, 2017, Dostálová et al., 2021), using mainly individual and group interviews with the experimental participants and the co-teaching teachers for data collection. For the experimental validation of effectiveness, we selected lessons conducted with the tandem co-teaching model (Murawski, 2017, Kursch, 2021), where both teachers are at the same level. The actual teaching was mainly standard frontal teaching supplemented by individual or group work of students. We made sure that the position of the teachers was approximately the same in both implementations, i.e., even in virtual co-teaching, we placed the screen in a similar location where the teacher would physically stand.

In the following section, this study will present a detailed analysis of one experimentally implemented lesson, i.e., it will describe in detail the German language lesson in primary school of the experimental group guided by virtual co-teaching and the teaching of the control group guided by standard co-teaching. The aim of the paper is to describe and compare these two lessons in detail, specifically in terms of the knowledge achieved, the educators' approach and the subjectively perceived benefits by the students.

### 3 METHODOLOGY

In order to achieve the stated goal, we rely on the methodological approaches of the case study, which is a qualitative research design that aims at a detailed analysis and description of the case through in-depth and multi-source information gathering (Hendl, 2016, Švaříček and Šedová, 2014). It is the multi-source data collection that is key to truly understanding the phenomena under study in their natural context. The so-called triangulation of research methods is typical for a case study, where researchers rely on, for example, interviews, questionnaires, observations, or document studies (Hendl, 2016).

At the core of the study is the definition of a case, whereby here we understand a case as a German language lesson implemented through virtual co-teaching. In line with the case study approaches, we used both quantitative and qualitative methodological approaches to describe the case under study in detail. However, the core part consisted of a qualitative part relying on individual and group interviews, document analysis and structured classroom observation. The results of the implemented lessons projected by the students' knowledge were then verified in line with the whole experiment by means of a knowledge test. An overview of the methods used is presented in Table 1.

**Table 1: Overview of the methods used in the study**

Method	Specifications	Respondents' characteristics
Individual interview	2 interviews with teachers	Teacher and co-teacher (native speaker)
Scenario analysis	1 scenario for both lessons	X
Observation	2 classes, one led by classical and the other by virtual co-teaching	8 pupils were present in the classical co-teaching, 9 pupils in the virtual co-teaching
Cognitive tests	2 tests given after each lesson	Classical co-teaching - 8 tests, virtual co-teaching - 9 tests
Focus group with teachers	1 after classes are over	2 co-teaching teachers
Focus group with pupils	2 after classes are over	The interview group consisted of five selected pupils each time

In the preparation of the lesson, we paid attention to the analysis of the lesson scenario and then individual interviews with teachers. The main objective of this phase was to find out how the preparation for a virtual and a regular co-teaching lesson is carried out, whether it differs from each other and what teachers describe it as, including possible obstacles and problems. During implementation, participant observation by a member of the research team (RT) was the main source of data, with the observer physically present during the physical lesson and online during the virtual lesson.

The observation was also based on comparing the scenario with the lesson implementation and observing the same activities during the virtual and physical lesson. The students' knowledge results were verified by a knowledge test that was distributed to both groups immediately after the lesson. The reflection of the teaching was carried out through three group interviews - with teachers, with pupils who had traditional co-teaching and with pupils who had virtual co-teaching. The interviews were recorded, listened to repeatedly and transcribed verbatim. The data from the interviews were analysed using open coding techniques (Švaříček and Šedová, 2007; Hendl, 2016; Svobodová, 2020), and the data were then grouped into meaning-related categories. The results section was structured according to the different areas under investigation, i.e., lesson preparation, actual implementation, results and reflection, and comparison with a lesson implemented by conventional co-teaching.

## 4 RESULTS

A detailed analysis of a virtual and physical co-teaching lesson presented key categories and themes in lesson preparation, delivery, outcomes, and reflection. In each of these sections, based on the method used, we were able to identify the core categories that were key to that particular part of the process. The results are presented as they were presented by our respondents, i.e., teachers and students, and relate only to the case under study, i.e., the implemented co-teaching.

### 4.1 Preparatory phase of co-teaching lessons

The preparatory phase included all the activities implemented before the start of the actual teaching, i.e., the standard preparation for the lesson, but also the technical setup for virtual co-teaching and the division of individual activities and activities between two teachers. In this phase we defined three main categories:

- Time intensity.
- Lesson structure and scenario
- Technical issues

Based on the interviews conducted, it became clear that it took the cooperating teachers more than twice as long to prepare the first real co-teaching lesson, namely six hours of preparation for two lessons, which included jointly selecting a suitable topic and then choosing appropriate teaching methods and forms. The teachers then worked together to prepare appropriate exercises and activities as well as a final test. It is logical that they were constrained in their lesson preparation by the structure of the experiment, i.e., the requirement for frontal teaching as a basis, and could only supplement it with activities that did not place demands on physical co-teaching that would not be feasible then in a virtual environment. Based on the preparatory phase, a detailed scenario was developed, which is presented in Table 2:

**Table 2: Co-teaching scenario**

Time	Phase	Activities	Form	Materials
3	Motivation Activation	D+P begrüßen SuS D fragt, wie das Wetter bei den SuS ist und wie es gestern war	Plenum	
7	Introduction to vocabulary	D präsentiert den Wortschatz SuS schreiben sich Übersetzung auf	Plenum	Präsentation mit Bildern und Phrasen, AB
8	Reproduction	SuS ordnen Bilder den Phrasen im Memory zu	Groups	Memory- Karten-Sets
7	Application 1	SuS sprechen und fragen im Tandem über die [fehlenden] Wetterinformationen	Pairs	Tandembogen zum Wetter
10	Application 2	Kontextualisierung Wettervorhersage (Hinführung: Wie ist wohl heute das Wetter in Deutschland? SuS vermuten) D liest Wettervorhersage einmal (Grobverstehen), beim zweiten Mal ergänzen SuS die Lücken (Details)	Individual work	Lückentext Wettervorhersage, Wetterkarte
5	Fixing	Vokabelquiz	Groups	Präsentation ohne Wörter
5	Understanding Application 3	Telefonat Prag-Hamburg	Plenum	
	Homework	Schreibe 5 Sätze über das Wetter an einen Ort in der Welt (z.B. Australien)		

*Source: compiled by co-teaching teachers*

Both teachers agreed that creating a detailed minute-by-minute scenario and rehearsing it without the students was absolutely necessary to complete both lessons at the same pace. They stated that it was very unusual to have to prepare such a precise structure for a learning process and that they normally tended to teach in a more relaxed way and respond to the needs of the children. The preparation was very challenging, but at the same time it was a new experience and pedagogical challenge for them, not so much in terms of physical or virtual co-teaching, but rather just in terms of having to repeat identical lessons for the purposes of the experiment.

Co-teaching and the possibility of preparing a lesson in two was a pleasant diversification of the teachers' regular work, but one that they could not imagine implementing regularly in the regular running of the school.

A specific category that has been described in previous works (e.g., Veteška et al., 2020) is the technical side of things, which also took several hours of setup and testing to ensure quality transmission from the classroom to the virtually connected teacher. In line with previous studies (Veteška et al., 2020) that have shown that the technical side is absolutely crucial for effective co-teaching, we prepared the classroom in such a way that it actually occupies the whole space comprehensively and allows the virtual teacher to see and react to all the classroom events. With regard to the technical requirements, it is also important to mention the financial requirements of technical equipment that is capable of transmitting audio and video of this quality to the virtual teacher.

Thus, in the preparation of the lesson, demandingness emerged as a kind of umbrella term for the identified categories. It is a demandingness in terms of resources - human, material and financial. The demandingness was also manifested in the time aspect of the preparation and then in a certain unnatural rigidity of a well-defined scenario.

## 4.2 Course of lessons

The course of the lesson was monitored using the participant observation method, the main aim of which was to determine whether the teachers adhered to the planned and differentiated structure of the physical and virtual lesson, and whether there were any other variables that could subsequently influence the outcome of the experiment. The observer also monitored student and teacher activity, which then formed the basis for the interviews.

When comparing the implementation of the lesson with the defined scenario, it should be noted that it was followed almost exactly, and only minute deviations were involved. Thus, the observation confirmed that the lessons were implemented as planned and in accordance with the requirements of the experiment.

There were several situations during the lesson where it would have been more appropriate to deviate from the script and would probably have happened in

a normal non-experiential learning situation. These were situations where a student was unsure of a task and would probably have appreciated a physical co-teacher coming to them and helping them directly, which were the activities that the experiment limited.

There were minor variations between virtual and physical co-teaching in the distribution of verbal expression of the teachers. In virtual co-teaching, students responded more naturally to the physical teacher and often overheard instructions and speech flowing from the television screen. Thus, the physical teacher had to turn the pupils' attention to the virtual teacher and actually warn in advance that she would be speaking.

The teacher's role thus naturally became a bit more of a moderator and took more control of the lesson. It is therefore an interesting finding that although tandem and balanced teaching was more likely to be implemented in the form of one teaching and one supporting in virtual co-teaching, even though there was strong support, it cannot be said that the virtual co-teacher was the director of the virtual lesson. He or she had to rely on his or her physical colleague to lead the lesson, deliver the words and draw the pupils' attention to them, or even repeat the instructions back to him or her and make sure that the pupils understood them in this delivery.

#### 4.3 Teaching results according to pupils' knowledge

Our research took the form of an experiment. For the purposes of the experiment, we chose as one of our application sponsors, a primary school, which we also describe here in the methodological section. The measured phenomenon was the learning of the curriculum in the German class. The trait was then the test score of each group. The groups were chosen as homogeneous independent groups, classes 5.A and 5.B. The control group was group 5.A, with eight members, which we called ROT. The experimental group was group 5.B, with nine members, which we called GRUN.

For both groups we investigated the students' previous performance in German. Thus, we did not change the groups as they both had the same mean score of the previous year's assessment. The control group had a classical co-teaching lesson with two teachers, while the experimental group was subjected to virtual co-teaching, i.e., one teacher physically present and the other present only virtually with the help of a 150 cm TV screen. To make the experiment valid, we had to separate all

distractions and ensure that the other variables were the same for both groups. Table 3 shows the influences that we eliminated.

**Table 3: Impacts and their elimination:**

Impact	Method of elimination
Technical failure	Secure WiFi access to dedicated router, connect UPS to TV and PC, disable automatic hardware shutdown.
Quality sound	Installation of special microphones with a requirement for spoken word capture quality and noise reduction using CVC technology.
Quality image	We used full HD resolution for a 150 cm TV.
Full classroom space scanning	The virtual teacher had an HD image of the entire class on his laptop to ensure a holistic perception similar to a person present in the classroom.
Same spatial layout	In both teaching situations, the teachers stood in the same places so as not to introduce an element of movement that could be a differentiating factor. Thus, in traditional co-teaching, the teacher stood in the same place as the television was placed in virtual co-teaching.
Same teaching content	In preparation, both teachers prepared the same curriculum content.
Same behaviour of teachers	For both cases, a script was created, according to which the teachers taught and thus created practically identical situations throughout the lesson. Including the questions and timing of each teaching section.
Same teachers	Both teachers were the same for both lessons.
Teaching time	Lessons were always in the morning at the same hour to avoid the effect of changes by pupil fatigue in the afternoon.
Testing within 2 hours after class	To eliminate the effects of forgetting, which varied more individually as time increased, both groups were tested within two hours of instruction.
Same test with the same criteria	Ensuring the same test, the same testing time and the same evaluation criteria

Thus, the only variable that changes in the experiment remains the virtuality of one of the teachers. The experiment took place in September 2021 and was supervised by Dr. Svoboda and Dr. Kursch, who checked that all criteria for a valid experiment were met by ensuring that all confounding influences that could bias the results were removed.

For the purposes of the experiment, we established the alternative hypothesis  $H_a$ :

$H_a$ : The test scores of students who took the virtual co-teaching class will be better than the test scores of students who took the traditional co-teaching class.

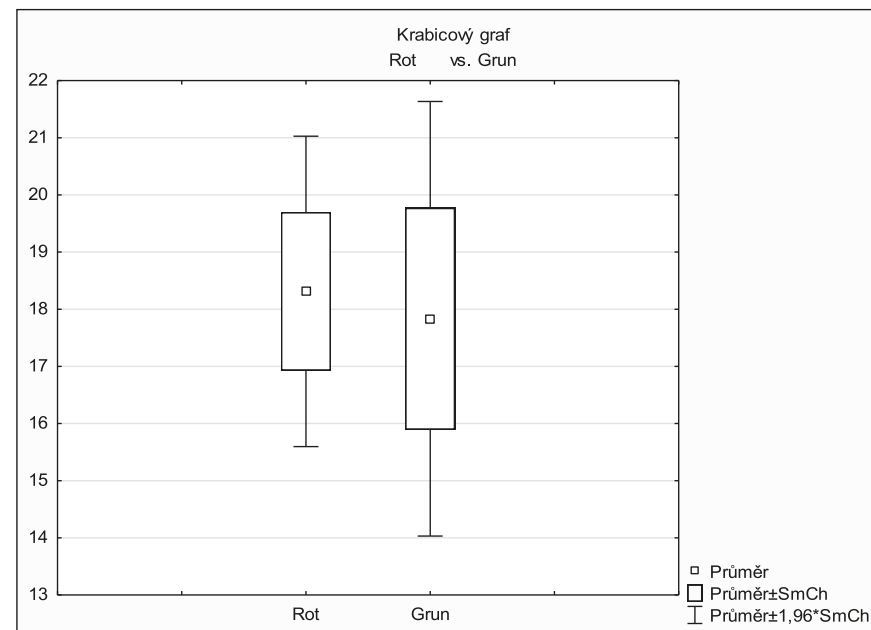
After the experiment was conducted, we evaluated the results using appropriate statistical methods. We used t-test for independent groups as a test statistic. Since our sample size was very small, we also performed a non-parametric Mann-Whitney U test. Table 4 shows the results of the t-test, which was performed using Statistica software.

**Table 4: Test results**

T-test pro nezávislé vzorky část 1											
skup. 1 vs. skup. 2	Průměr	Průměr	Hodnota t	SV	p	t samost.	SV	p	Počet platn.	Počet platn.	sm.odch.
Rot vs. Grun	18,31250	17,83333	0,196317	15	0,846997	0,201001	14,06026	0,843576	8	9	3,918249
T-test pro nezávislé vzorky část 2											
skup. 1 vs. skup. 2	F-poměr	p	Levene	SV	p	Brn-Fors	SV	p	Průměr 1	Int. spolehl.	Int. spolehl.
Rot vs. Grun	2,206455	0,313415	0,732286	15	0,405606	0,620599	15	0,443096	0,479167	-4,63173	5,590066

The results in the table show that we reject the alternative hypothesis and confirm the null hypothesis, i.e., that the test results for both groups are not statistically significantly different at the significance level  $\alpha = 0.05$ ,  $p > 0.05$ . Thus, we conclude that the results are almost the same. Figure 1 shows the differences in the two groups.

**Figure 1: Comparison of test results of the experimental group (Grun) with the control group (Rot)**



We also performed an additional non-parametric Mann-Whitney test, the results of which are shown in Table 5. We have come to confirm our results using this test as well.

**Table 5: Supplementary Mann-Whitney test**

Proměnná	Mann-Whitneyův U Test (w/oprava na spojitost)								
	Sčt poř.	Sčt poř.	U	Z	p-hodnot	Z	p-hodnot	platných	platných
Pupils	45,50000	9,500000	6,500000	0,261116	0,794003	0,262714	0,792772	8	2

For clarity, we present the effect size we calculated using Glass delta, which we chose due to the assumption of separate variance estimates. The Glass delta is -0.12, which is a marginal effect.

We are aware of the limitations of our experiment. One of them is the small sample of students. In the course of the project, the experiment has been and will be repeated several times with larger numbers of pupils in classrooms at other schools under otherwise identical conditions. Another limitation is the impossibility of randomizing pupils in groups. This would require further preparation with the school



management, but we intend to conduct our next experiments with randomization of the distribution of pupils into groups.

Nevertheless, despite these limitations, the experiment can be considered valid, and conclusions can be drawn from it, which must be verified over time with further experiments of a similar type. Our findings suggest that virtual co-teaching could be a full-fledged alternative to traditional co-teaching in terms of the impact on learning represented by ex-post test results.

#### 4.4 Reflection and comparison of implemented lessons

The reflection on teaching is presented from the perspective of both students and teachers and is based on analysed data from group interviews in which we identified the following categories:

- Added value
- Motivation and activation
- Barriers to virtual co-teaching

The added value from the pupils' point of view was mainly the presence of a second teacher, who could thus influence the pace of the lesson, explain something differently and also provide a different perspective. From the teachers' point of view, it was more a new experience, a chance to learn something new and to try working with a colleague. Teachers also mentioned that it was actually nice to have two in the classroom. Positive factors were voiced for physical co-teaching. For virtual, they did too, but with the caveat that if they were physically present, it would be better after all.

A clear added value of virtual co-teaching, mentioned by both students and teachers, was the possibility of its use extending beyond the school building and possibly beyond national borders. Pupils would be interested in working directly with a person from abroad in this way, rather than with a native speaker who might normally come into the classroom. They wanted to experience the real authenticity of a foreign environment and thus get to know, inadvertently, a completely different environment. Similarly, the teachers were aware that not all schools may have native speakers available and that by extending the virtual co-teaching method it would

be easier to get them into schools, and they also saw the added value in connecting other interesting people who could not otherwise come to school.

The motivation and activation for virtual co-teaching was in its novelty, the students were intrigued by the new use of a special hybrid learning device and its connection to the interactive whiteboard. They reported that new things can always intrigue them and also admitted that the initial enthusiasm soon fades. Teachers also reported an element of novelty, but more in the context of their professional development, they were motivated to go along to an interesting project and try something new.

Among the barriers to virtual co-teaching, we again identified mainly technical settings. Despite the high-quality zoom camera, the atmosphere in the classroom could not be fully felt and the students were not as clearly visible and virtual. Another major obstacle was the overall difficulty of co-teaching (whether physical or virtual), especially in its preparation. Teachers mentioned that it really took a lot of time to plan everything in this way and it would not be possible to incorporate co-teaching into daily or weekly lessons as a standard for this reason. They reported that they could imagine occasional implementation during projects, for example, but not in the standard running of the school.

An interesting aspect and in fact a barrier mentioned by the teachers was their rapport with each other, they stated that if they did not like each other humanly and collegially they could not teach together in this way and they could not imagine devoting so much energy to all the necessary phases for the implementation of co-teaching. Similarly, students mentioned the relationship and expressed concern that if, for example, the teachers did not get along, then the lesson would be more about them arguing and not about teaching. It is clear, therefore, that pupils also perceived that negative teacher rapport could be a barrier to a good lesson.

An interesting message was that the scenario itself was also a definite barrier. Teachers understood that it was necessary to script the lesson and allocate the different roles but felt unnecessarily overly bound by it; if they had not been so precise, they would have been able to make better use of the physical co-teaching, i.e., the moment when they were both present in the classroom.



## 5 CONCLUSION

It is evident that the teaching analysed in our study was implemented in a certain stylized way, for both its implementations. In normal teaching, everything never runs exactly the same, as our teachers also reported. Also, the constraints that we gave in physical co-teaching, i.e., staying essentially at the front of the classroom at all times and not walking between the children, would probably not have been observed in real teaching, and the co-teaching teachers would have taken advantage of the dual physical presence, walking between the students and engaging at different points. Research has clearly demonstrated the difficulty of co-teaching at all stages and especially in the preparation phase, where it is necessary to consider teachers' relationships and their subjective willingness to cooperate in addition to the time invested (Adamec 2018; Adamec 2019; Kryštof and Adamec, 2021).

A positive finding was that the effectiveness reflected in the students' knowledge attainment was the same for both physical and virtual co-teaching. With regard to follow-up experimental lessons throughout the project, these results will be repeatedly retested and validated. The teachers' approach to the possibilities of using virtual co-teaching, for example, in the case of the lack of native speakers in Czech schools or the impossibility of getting experts from specific areas into schools, is another area that will be addressed in the project. From the point of view of efficiency, if we define it as the achievement of test results including all the costs of co-teaching, virtual co-teaching seems to be more efficient than classical co-teaching at this stage of the project. This conclusion can easily be reached by calculating the costs of commuting, time loss, ease of availability of teachers (e.g., native speaker, production expert, foreign expert, etc.), assuming that the costs of the technology are also used for other purposes and are therefore not acquired only for the purpose of co-teaching.

## References

- Adamec, P. (2019). Vztah a motivace učitelů odborných předmětů k dalšímu vzdělávání. *Pedagogika: časopis pro vědy o vzdělávání a výchově*, 69(2).
- Adamec, P. (2021). The importance of ICT competencies development within the pregradual education of future teachers in the current situation context. In J. Veteška (ed.). *Vzdělávání dospělých 2020 – reflexe, realita a potenciál virtuálního světa: sborník z 10. mezinárodní virtuální vědecké konference*. Česká andragogická společnost, pp. 23-30. Dostupné z [https://kamv.cz/public/storage/downloads/konf-2020/sbornik\\_VD2020.pdf](https://kamv.cz/public/storage/downloads/konf-2020/sbornik_VD2020.pdf)
- Adamec, P. (2018). Teorie a praxe řízení kvality v celoživotním vzdělávání na veřejné vysoké škole. *Lifelong learning – celoživotní vzdělávání*, 8(2), 49-73.
- Bauwens, J., Hourcade, J. & Friend, M. (1989). Cooperative Teaching: A Model for General and Special Education Integration. *Remedial and Special Education*, 10(2), 17-22.
- Beninghof, A., 2012. *Co-Teaching That Works: Structures and Strategies for Maximizing Student Learning*. San Francisco: Jossey-Bass.
- Dostálová, V., Bártová, A., Bláhová, H., & Holmerova, I. (2021). The experiences and needs of frail older people receiving home health care: A qualitative study. *International Journal of Older People Nursing*. 17. 10.1111/opn.12418.
- Dove, M. & Honigsfeld, A. (2018). *Co-Teaching for English Learners: A Guide to Collaborative Planning, Instruction, Assessment, and Reflection*. Thousand Oaks, California: Corwin A SAGE Company.
- Fluijt, D., C. Bakker & Struyf, E. (2016). Team-reflection: The missing link in co-teaching teams. *European Journal of Special Needs Education*, 31(2), 187-201
- Fryč, J., Z. Matušková, P. Katzová, et al. (2020). *Strategie vzdělávací politiky České republiky do roku 2030+*. Praha: Ministerstvo školství, mládeže a tělovýchovy.
- Graneheim, U. H., Lindgren, B.-M., & Lundman, B. (2017). Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today*, 56, 29–34. doi:10.1016/j.nedt.2017.06.002
- Hendl, J. (2016). *Kvalitativní výzkum: základní teorie, metody a aplikace*. 4. vyd. Praha: Portál.

Kryštof, D. & Adamec, P. (2021). Reflections on pedagogical interventions: observation during remote teaching. In *EDULEARN21 – 13th International Conference on Education and New Learning Technologies Proceedings*. International Academy of Technology, Education and Development, pp. 3069-3073.

Kursch, M. (2021). Skrytý potenciál virtuálního co-teachingu. *Prohuman*. <https://www.prohuman.sk/pedagogika/skryty-potencial-virtualniho-co-teachingu>

Murawski, W. W. (2003). School collaboration research: Successes and difficulties. *Academic Exchange Quarterly*, 7(3), 104-108

Murawski, W. W. (2010). *Collaborative Teaching in Elementary Schools: Making the Co-Teaching Marriage Work!*. SAGE Publications.

Murawski, W. W. (2017). *Beyond Co-Teaching Basics: A Data-Driven, No-Fail Model for Continuous Improvement*. Virginia: ASCD.

Novosák, J., Z. Modráček, P. Suchomel, O. Andrys, T. Zatloukal & Pražáková, D. (2021). *Společné znaky vzdělávání v úspěšných základních školách: Tematická zpráva*. Praha: ČŠI.

Rexroat-Frazier, N. & Chamberli, S. (2019). Best Practices in Co-Teaching Mathematics with Special Needs Students. *Journal of Research in Special Educational Needs* [online], 19(3), 173-183.

Spilková, V., Tomková, A., Mazáčová, N., Kargerová et al. (2015). *Klinická škola a její role ve vzdělávání učitelů*. Praha:

Svobodová, Z. (2020). *Základy metodologie výzkumu (kvalitativní přístupy)*. Univerzita Karlova, Pedagogická fakulta. <https://cuni.futurebooks.cz/detail-knihy/zaklady-metodologie-vyzkumu-kvalitativni-pristupy>.

Svobodová, Z. (2021). Virtual Co-Teaching: reflection, reality and potential. In *Kursch, M., Veteška, J. (eds.) Vzdělávání dospělých 2020 – reflexe, realita a potenciál virtuálního světa. = Adult Education 2020 – Reflection, Reality and Potential of the Virtual World : proceedings of the 9th International Adult Education Conference : 16 December 2020, Prague*. Praha: Česká andragogická společnost. S. 36-43.

Švaříček, R. & Šedová, K. (2014). *Kvalitativní výzkum v pedagogických vědách*. 2. vyd. Praha: Portál.

Veteška, J., Kursch, M., Svobodová, Z., Tureckiová, M., & Paulovčáková, L. (2020). Longitudinal co-teaching projects – scoping review. *17th International*

*Conference On Cognition And Exploratory Learning In Digital Age*, pp. 115-123. ISBN 978-989-8704-22-1.

Veteška, J. & Kursch, M. (2019). Paradigma „Vzdělávání 4.0“ v éře digitalizace a globalizace. In Veteška, J. (ed.) *Vzdělávání dospělých 2018 – transformace v éře digitalizace a umělé inteligence = Adult Education 2018 – transformation in the era of digitization and artificial intelligence: proceedings of the 8th International Adult Education Conference, 11-12th December 2018 Prague*. Praha: Česká andragogická společnost, s. 15-23.

## Acknowledgment

This study was supported by the Technology Agency of the Czech Republic (New educational method for the 21st century: Virtual-Co-Teaching, TL03000133).

## Contact details:

Mgr. Zuzana Svobodová, Ph.D., DBA  
 doc. PhDr. Martin Kursch, Ph.D.  
 prof. PhDr. Jaroslav Veteška, Ph.D., MBA  
 Department of Andragogy and Educational Management  
 Faculty of Education, Charles University in Prague  
 Myslíkova 7  
 110 00 Praha 1, CZECH REPUBLIC  
 E-mail: zuzana.svobodova@pdf.cuni.cz

---

# CURRENT CHANGES IN PEOPLE MANAGEMENT AND DEVELOPMENT AND THEIR POSSIBLE IMPLICATIONS FOR FUTURE PROFESSIONAL DEVELOPMENT PRACTICE

---

Michaela Tureckiová

## Abstract:

The paper examines critical changes that are occurring in people management and development of employees in the current context of development, which are significantly affected by the pending pandemic of the COVID-19 disease, which has affected various sectors, often in diametrically opposed ways. Changes in the whole system of professional development (initial and continuing), which until recently had been rather evolutionary, have thus been dramatically diversified. Research and other sources describe dilemmas and paradoxes in these areas. The intention of this paper is to highlight the realities that have influenced the current shape of development of selected groups of employees, including possible implications for the future practice of developing individuals and organisations.

## Key words:

COVID-19, change, human resource/people management, learning/training and development of employees, organizational development, professional development (initial, continuing).

## 1 INTRODUCTION

More significant changes in approaches to education and development have occurred gradually over the past few decades. The formal education system (including initial professional development) as well as the continuing education segment, which also includes continuing professional education/development, have been changing (Matouš, Paulovčáková, Tureckiová & Veteška, 2021; Weindenseld & Bashevis,

2013). The application of a strategic form of personnel work (human resource and/or people management) has also been widely discussed in relation to the strategic approach to development and creating opportunities for effective employee learning (Veteška et al., 2013; Armstrong & Taylor, 2020; Delahaye, 2018; Dulebohn, 2018; Sadler-Smith, 2021). The fundamental development of modern, interactive and activation methods and the emergence of new forms of development has also been enabled by the emergence and expansion of ICT and its use for education (Kirkwood & Price, 2014; Ratana & Danut, 2019, etc.). The paradigm shift of education in the era of globalization and digitalization, the so-called "Education 4.0", has gradually become part of the professional discourse (Almeida & Simoes, 2019; Veteška & Kursch, 2019).

The pandemic situation since the beginning of spring 2020 has naturally affected not only education, but all spheres of working and non-working life. In the context of people management and development, which is the primary focus here, this has included: the transition to remote working (usually implemented as work from home); the closure of departments or entire establishments or organisations, at least for a short period of time; the need to immediately equip workplaces with the necessary protective equipment and devices and to provide health and safety training for first contact employees against COVID-19; and other changes in the way people work and in the way they are managed and developed. These realities became part of the lives of many millions of people over the next nearly two years.

Lives in which the trajectories of their careers and the possibilities of their working lives continue to change in unprecedented and unpredictable ways. Education and development, both from a lifelong and lifewide perspective and from the perspective of their various actors (especially learners, including adults in different roles; educators; employers and policy makers) have been and continue to be among the fields that have been significantly affected by the pandemic and its consequences (Bjursell, 2020; Daniela & Visvizi, eds., 2020; Veteška & Kursch, eds., 2021).

Considering the primary issue of actual approaches to and expected changes in curriculum of (continuing) professional development, the text of the paper focuses mainly on the observable and nowadays also recorded in the sources non-linearity and turbulence of the development in this area. Information on the situation

in technical and vocational education and training (TVET)<sup>1</sup> in the period of the COVID-19 pandemic is used as a starting point and broader (general) context for this. Furthermore, the changes in people/human resource management and their possible implications for the content of learning and development of employees are described. Selected examples will be used to demonstrate how approaches to the employment and development of different groups of employees have changed and what consequences this has had for the human resource management and development system in different types of work organisations. The information from this paper can thus be used for subsequent discussion and at least partial prediction of the development of the area under study in the post-pandemic period.

## 2 METHODOLOGY

Given the liveliness and variability of the thematic area under investigation, narrative literature review was chosen as the primary method for this text. This allows for greater freedom to comment on the topic (Fink, 2019). In this case, the focus was on the fundamental changes occurring in the management and development of employees in settings affected by the pending COVID-19 disease pandemic (in the time period under study, spring 2020 to present). In doing so, the intention was to identify key areas of these changes, and in particular their potential implications for continuing professional development practice, and thus also to indicate, at least in outline, more general trends in the functions and content of people management/leadership and development.

Data and information were therefore sought primarily for the area of continuing professional development, which is implemented in work organisations as learning/training and development of employees (human resource development). For the framing context, the causes of shortcomings, opportunities and possibilities for improvement more generally applicable to the professional development segment (in the umbrella concept of TVET) were also reflected. Publicly available (electronically or in print) scientific and other scholarly sources, published mainly but not only in English, were examined. For the search of electronic resources,

---

<sup>1</sup> For the purposes of this text, we consider TVET to be an umbrella term for the learning activities referred to in this text as professional development, in both its basic components (initial and continuing) (for further reference see UNEVOC-UNESCO, n.d.).

the Google Scholar database and Charles University's discovery service (ukaz.cuni.cz) were primarily used, using a combination of key terms related to professional development; education/learning and/or development of employees; (pandemic) COVID-19 and/or human resource/personnel management/development. The search for resources was done manually. Resources from the period 2020-2021 were included, the content of which was relevant to the issue under study here (see also References section). Texts that dealt exclusively with the epidemiological situation were not included in the selection.

### 3 FINDINGS – SITUATION AND OPTIONS

The limitation of opportunities for face-to-face work and educational activities meant that, especially at the beginning of the pandemic, an immediate response was needed. In the case of management and leadership, this was manifested in a shift to remote forms of work (mostly work from home) wherever possible and to providing safe working conditions for those employees whose work activities required direct contact with customers or clients of services. In the case of management and leadership, this was manifested in a shift to remote forms of work (mostly work from home) wherever possible and to providing safe working conditions for those employees whose work activities required direct contact with customers or clients of services.

For the lifelong learning component primarily studied here (i.e., professional development in work organisations), the onset of the COVID-19 pandemic initially meant a significant reduction to discontinuation of training and development activities. (Hamouche, 2021; Kshirsagar, Mansour, McNally & Metakis, 2020; International Labour Organization, 2021) New online health and safety training activities were implemented. For obvious reasons, these were mainly related to ensuring prevention of COVID-19 amongst 'frontline' employees (doctors, medical staff, social and other essential services/retail workers etc.; Kazdova, 2020 and others – see below).

However, even the subsequent transition to distance education and training activities did not mean a return to the original scope of professional development in the context of TVET. The initial total closure of TVET centres was reported by 90% of respondents to the International Labour Office (ILO), the United Nations

Educational, Scientific and Cultural Organization (UNESCO) and the World Bank survey, with the remainder reporting partial closure (International Labour Organization, 2021, p. 3). Distance (primarily digital) and remote teaching and learning has been introduced much more rapidly in formal education (Daniel, 2020; Ivenicki, 2021; Jansone-Ratinika, Koka, Koke, Brants & Strods, 2021). It is only since around the mid-2020 that work organisations have adapted to at least some extent to online forms of employee development (Kazdova, 2020; Kshirsagar, Mansour, McNally & Metakis, 2020).

The summarized factors causing problems with distance training of TVET learners included: lack of technological infrastructure (electricity, internet, necessary equipment); unpreparedness of TVET teachers for distance learning as a result of their insufficient digital competences; small number of user-friendly platforms and possible lack of available financial resources especially on the part of small TVET providers (International Labour Organization, 2021, p. 4-5). Overall, the small number and deficiencies in the functioning of 'user-friendly' platforms did not provide a good environment for vocational education and training, particularly in the early days of the pandemic, and failed especially when they needed to be used at national level (ibid, p. 5).

All of the above, and certainly some others, could have led to a deterioration in the accessibility and availability of TVET programmes and potentially to the elimination of the progress previously made in this area. On the other hand, the move to the online environment has brought developments in forms of education other than face-to-face. There have been improvements in the digital competencies of learners and teachers and the incorporation of alternative methods in teaching (e.g., incorporation of tutorials into TVET and the use of other media for learning; improved recordings of teaching; printed or multimedia teaching materials) (Daniela & Isvizi, eds., 2020; International Labour Organization, 2021, p. 23). Improvements in digital competencies have not only occurred in educators (teachers) and learners, but also observable in educational managers, who have had to acquire remote leadership skills very quickly in addition to their own digital competencies (Karakose, Polat & Papadakis, 2021; Pavlas et al., 2020).

At least the initial significant reduction in training and development activities and the prolonged pandemic (epidemic) and subsequent financial and economic situation had a particularly negative impact on marginalised groups in further



education. They are at risk of falling further behind not only in view of current and predicted developments in society, but also because of their "pre-existing social and digital divides" (International Labour Organization, 2021, p. 1). In addition, employees who already belonged to low-income (not necessarily low-skilled – MT note) occupational groups and worked part-time or as temporary employees before the pandemic started are particularly at risk in terms of future (re)employment and career/professional development (Hite & McDonald, 2020, p. 434). Low-wage groups often include those in retail and health care (Collings, Nyberg, Wright & McMackin, 2021) and, at least in part, employees in hotel and related services in the tourism industry (Jiang & Wen, 2020; Karatepe, Saydam & Okumus, 2021).

These are at the same time representatives of those occupational groups that were alternately at direct risk of infection and at risk of unemployment, or at least temporarily reduced income, during the COVID-19 pandemic. Employees at risk of any of the above negative effects of the COVID-19 pandemic also exhibit increased mental health problems, absenteeism, and reduced levels of life satisfaction (Collings, Nyberg, Wright & McMackin, 2021; Hite & McDonald, 2020; Karatepe, Saydam & Okumus, 2021).

Management/leadership and, in a broader sense, care (development) of employees should include access to active information about the pandemic and the impact of the spread of the disease on their work; about internal guidelines and support in the workplace/organisation; and ensuring open communication also from employees about the challenges they face, especially during a pandemic (Elsafty & Ragheb, 2020). Ensuring these opportunities should not only apply to the previously mentioned employee groups, but also to those currently (but not permanently or preferably) working from home. The disadvantages of remote work include social isolation, poor communication between the employee and the organization, and unclear boundaries between personal and work life (Bajgar, Janský & Šedivý, 2020). Therefore, it is advisable to allow employees to engage in online learning activities (e.g. e-learning, webinars, podcasts, live interviews, quizzes...). The content of the development activities can include, among other things, instructions for physical and mental exercises and other harmonizing activities (meditation, fitness exercises, anxiety and stress management) that strengthen individuals' resilience to crisis and stress situations. Team activities are also to be encouraged (Elsafty & Ragheb, 2020; Chanana & Sangeeta, 2020). The importance of training and educational activities is also increasing where employees are preparing to work from home (Hamouche, 2021).

A specific group that development activities have traditionally focused on is key and/or talented employees. During the pandemic, there have been changes and adjustments in the form and scope of professional development programmes for these groups as well. The overall reduction in development opportunities during the COVID-19 pandemic gave the impression of rapid cost-cutting by organisations in that area. For talent groups, the reduction was not as significant as for other groups of employees (Tabor-Błażewicz, 2021). Fewer development activities were conducted externally, on an international basis (internships) and in graduate programs (MBAs). On the contrary, according to the research data, opportunities for development through practical learning, job rotation or in-house training increased. In addition, mentoring and coaching continued to take place in the organisations studied (ibid, p. 130).

## 4 DISCUSSION AND PRACTICAL IMPLICATIONS

The importance of training and development activities is manifested both in addressing and preventing negative phenomena related to the course and consequences of the COVID-19 pandemic, and also in the positive sense of maintaining the employability of individuals and entire professional groups in continuously changing conditions. Not only employees but also work organizations are under pressure to change and develop the competencies of their workforce in the context of new forms and types of work in the "distance economy" (Hamouche, 2021, p. 7). From the previous text of this paper, it is clear that overall the availability (scope) of training and development has mostly declined during the pandemic. This is one of the main opportunities ('challenges') for HR/employee development professionals.

It seems necessary to develop professional development programmes that reflect the changed situation in the labour market and use forms and methods of professional development that allow the development of hybrid and flexible ways of working. At the same time, managers' skills in remote (virtual) leadership and supervision of employees need to be developed (Dirani et al, 2020; Khalil et al., 2020; Hamouche, 2020). Professional development and professionals in it can "play a significant role in helping individuals and organizations find and support resilience, manage the shocks, replenish reduced resources, and build more sustainable career cultures" (Hite & McDonald, 2020, p. 435). This is, of course, assuming that the positive

outcomes achieved in professional development during the pandemic will be reflected and used in subsequent change processes.

## 5 CONCLUSION

Based on a narrative literature review, the paper reflects on the impact of the COVID-19 pandemic on the field of people management and development and on the possible impact of the current situation on the future of professional development. The pandemic situation has meant a halt to natural development in the wider context of TVET and therefore in the area of continuing professional development (training/learning and development of employees) primarily studied here. Given the multiplicity and complexity of the issues raised by the COVID-19 pandemic, information on the TVET situation was used to provide context and further interdisciplinary linkages.

The intent of this paper was to highlight in greater extend how training/learning and development opportunities for selected groups of employees changed during the pandemic. The paper thus provides specific examples of options for action to ensure that employees are given the opportunity to further develop the necessary competencies and that the experience of hybrid forms of work and learning can continue to be used successfully.

It can be concluded that overall approaches to professional development have changed during the pandemic. However, the conclusions and contribution of this paper must be considered in the light of the method chosen (narrative literature review) and the fact that the COVID-19 pandemic is still ongoing.

## References

- Almeida, F. & Simoes, J. (2019). The Role of Serious Games, Gamification and Industry 4.0 Tools in the Education 4.0 Paradigm. *Contemporary Educational Technology*, 10(2), 120-136. <https://doi.org/10.30935/cet.554469>
- Armstrong, M. & Taylor, S. (2020). *Armstrong's handbook of human resource management practice*. Kogan Page Publishers.
- Bajgar, M., Janský, P. & Šedivý M. (2020). *Kolik nás může pracovat z domova? Studie IDEA anti COVID-19*. Národohospodářský ústav AVČR.
- Bjursell, C. (2020). The COVID-19 pandemic as disjuncture: Lifelong learning in a context of fear. *International Review of Education*, 66, 673-689. <https://link.springer.com/article/10.1007/s11159-020-09863-w>
- Collings, D. G., Neberg, A. J., Wright, M. & McMackin, J. (2021). Leading through paradox in a COVID-19 world: Human resources comes of age. *Human Resource Management Journal*, 31(4), 819-833. <https://onlinelibrary.wiley.com/doi/10.1111/1748-8583.12343>
- Daniel, S. J. (2020). Education ant the COVID-19 pandemic. *Prospects*, 49, 91-96. <https://link.springer.com/article/10.1007/s11125-020-09464-3>
- Daniela, L. & Visvizi, A. (Eds.). (2021). *Remote Learning in Times of Pandemic – Issues, Implications and Best Practiece*. Routledge.
- Delahaye, B. (2018). *Human Resource Development*. Publishing 451.
- Dirani, K. et al. (2020). Leadership competencies and the essential role of human resource development in times of crisis: a response to Covid-19 pandemic, *Human Resource Development International*, 23(9). [https://www.researchgate.net/publication/342876269\\_Leadership\\_competencies\\_and\\_the\\_essential\\_role\\_of\\_human\\_resource\\_development\\_in\\_times\\_of\\_crisis\\_a\\_response\\_to\\_Covid-19\\_pandemic](https://www.researchgate.net/publication/342876269_Leadership_competencies_and_the_essential_role_of_human_resource_development_in_times_of_crisis_a_response_to_Covid-19_pandemic)
- Dulebohn, J. (2018). *The Brave New World of EHRM 2.0*. Infromation Age Publishing.
- Elsafty, A. S. & Ragheb, M. (2020). The Role of Human Resource Management Towards Employees Retention During Covid-19 Pandemic in Medical Supplies Sector – Egypt, *Business and Management Studies*, 6(20), 50-59. [https://www.researchgate.net/publication/342556132\\_The\\_Role\\_of\\_Human\\_Resource\\_Management\\_Towards\\_Employees\\_Retention\\_During\\_Covid-19\\_Pandemic\\_in\\_Medical\\_Supplies\\_Sector\\_-\\_Egypt](https://www.researchgate.net/publication/342556132_The_Role_of_Human_Resource_Management_Towards_Employees_Retention_During_Covid-19_Pandemic_in_Medical_Supplies_Sector_-_Egypt)



Fink, A. (2019). *Conducting Research Literature Reviews: From the Internet to Paper*. SAGE Publications Inc.

Hamouche, S. (2021). Human resource management and the COVID-19 crisis: implications, challenges, opportunities, and future organizational directions. *Journal of Management & Organization*, 1-16. <https://www.cambridge.org/core/journals/journal-of-management-and-organization/article/human-resource-management-and-the-covid19-crisis-implications-challenges-opportunities-and-future-organizational-directions/6857481FD64558659EE4C17C6DAE9AB9>

Hitte, L. M. & McDonald, K. S. (2020). Careers after Covid-19: challenges and changes, *Human Resource Development International*, 23(4), 427-437. <https://www.tandfonline.com/doi/full/10.1080/13678868.2020.1779576>

Chanana, N. & Sangeeta. (2020). Employers' engagement practices during COVID-19 lockdown, *Journal of Public Affairs*, 21(4). [https://www.researchgate.net/publication/345995938\\_Employee\\_engagement\\_practices\\_during\\_COVID-19\\_lockdown](https://www.researchgate.net/publication/345995938_Employee_engagement_practices_during_COVID-19_lockdown)

International Labour Organization. (2020). *Skills development in the time of COVID-19: Taking stock of the initial responses in technical and vocational education and training*. [https://www.ilo.org/wcmsp5/groups/public/-/-ed\\_emp/-/-ifp\\_skills/documents/publication/wcms\\_776788.pdf](https://www.ilo.org/wcmsp5/groups/public/-/-ed_emp/-/-ifp_skills/documents/publication/wcms_776788.pdf)

Ivenicki, A. (2021). Digital Lifelong Learning and Higher Education: multicultural strengths and challenges in pandemic times. *Ensaio*, 29(111), 360-377. <https://www.scielo.br/j/ensaio/a/Vg6JjVrybF59WxL3sRwgzhq/?format=pdf&lang=en>

Jansone-Ratinika, N., Koka, R., Koke, T., Brants, M. & Strods, R. Learning and teaching during COVID-19: Survey finding. In: Daniela, L. & Visvizi, A. (Eds.). (2021). *Remote Learning in Times of Pandemic – Issues, Implications and Best Practices* (164-180). Routledge.

Jiang, Y. & Wen, J. (2020). Effects of COVID-19 on hotel marketing and management: a perspective article. *International journal of contemporary hospitality management*, 32(8), 2563-2573. <https://www.emerald.com/insight/content/doi/10.1108/IJCHM-03-2020-0237/full/html>

Karakose, T., Polat, H. & Papadakis, S. (2021, 5.12.) Examining Teachers' Perspectives on School Principals' Digital Leadership Roles and Technology Capabilities during the COVID-19 Pandemic. *Sustainability* 12, 13(23). [mdpi.com/2071-1050/13/23/13448](https://www.mdpi.com/2071-1050/13/23/13448)

Karatepe, O. M., Saydam, M. & Okumus, F. (2021). COVID-19, mental health problems, and their detrimental effects on hotel employees' propensity to be late for work, absenteeism, and life satisfaction, *Current Issues in Tourism*, 24(7), 934-951. <https://www.tandfonline.com/doi/abs/10.1080/13683500.2021.1884665?journalCode=rcit20>

Kazdová, A. (2020). Koronavirus mění trendy ve firemním vzdělávání. *Retail News*, 5, 52-53. <https://www.retailnews.cz/2020/05/25/koronavirus-meni-trendy-ve-firemnim-vzdelavani/>

Khalil, M. D. et al. (2020). Leadership competencies and the essential role of human resource development in times of crisis: a response to Covid-19 pandemic. *Human Resource Development International*, 23:4, 380-394, DOI: 10.1080/13678868.2020.1780078

Kirkwood, A. & Price, L. (2014). Technology-enhanced learning and teaching in higher education: what is 'enhanced' and how do we know? A critical literature review. *Learning, media and technology*, 39(1), 6-36. [https://www.researchgate.net/publication/341645940\\_A\\_Critical\\_Reflection\\_on\\_Relationship\\_between\\_ICT\\_and\\_Change\\_Management\\_in\\_Enhancing\\_Teaching\\_and\\_Learning\\_Performances](https://www.researchgate.net/publication/341645940_A_Critical_Reflection_on_Relationship_between_ICT_and_Change_Management_in_Enhancing_Teaching_and_Learning_Performances)

Kshirsagar, A., Mansour, T., McNally, L., & Metakis, M. (2020, 17.3.). *Adapting workplace learning in the time of coronavirus*. McKinsey & Company. <https://www.mckinsey.com/business-functions/mckinsey-accelerate/our-insights/adapting-workplace-learning-in-the-time-of-coronavirus?cid#>

Matouš, Z., Veteška, J., Paulovčáková L. & Tureckiová, M. (2020). *Management vzdělávání dospělých a vzdělávacích organizací*. Česká andragogická společnost.

Pavlas, T. et al. (2020). *Vzdělávání na dálku v základních a středních školách – Tematická zpráva*. Česká školní inspekce. [https://www.csicr.cz/Csicr/media/Prilohy/PDF\\_el.\\_publikace/Tematick%C3%A9%20zpr%C3%A1vy/Vzdelavani-na-dalku-v-ZS-a-SS-Tematicka-zprava.pdf](https://www.csicr.cz/Csicr/media/Prilohy/PDF_el._publikace/Tematick%C3%A9%20zpr%C3%A1vy/Vzdelavani-na-dalku-v-ZS-a-SS-Tematicka-zprava.pdf)

Ratana, S. & Danut, D. (2019). A Critical Reflection on Relationship between ICT and Change Management in Enhancing Teaching and Learning Performances. *Balkan Region Conference on Engineering and Business Education*, 3(1), 406-415. [https://www.researchgate.net/publication/341645940\\_A\\_Critical\\_Reflection\\_on\\_Relationship\\_between\\_ICT\\_and\\_Change\\_Management\\_in\\_Enhancing\\_Teaching\\_and\\_Learning\\_Performances/link/5ecd0d3892851c313aeabbbbe/download](https://www.researchgate.net/publication/341645940_A_Critical_Reflection_on_Relationship_between_ICT_and_Change_Management_in_Enhancing_Teaching_and_Learning_Performances/link/5ecd0d3892851c313aeabbbbe/download)

Sadler-Smith, E. (2021). *Human Resource Development: From Theory into Practise*. SAGE Publications Ltd.

Tabor-Błażewicz, J. (2021). The Development of Key Positions in Crises on the Example of the COVID-19 Pandemic. *Annales Universitatis Mariae Curie-Skłodowska, Sectio H Oeconomia*, 55(2), 125-134.

UNEVOC-UNESCO. (n.d.). *What is TVET?* <https://unevoc.unesco.org/home/TVET>

Veteška J. & Kursch, M. (2019). „Vzdělávání 4.0“ v éře digitalizace a globalizace. In Veteška, J. (Ed.). *Vzdělávání dospělých 2018 – transformace v éře digitalizace a umělé inteligence = Adult Education 2018 – transformation in the era of digitization and artificial intelligence: proceedings of the 8th International Adult Education Conference* (15-23). Česká andragogická společnost.

Veteška, J. & Kursch, M. (Eds.). (2021). *Vzdělávání dospělých 2020 – reflexe, realita a potenciál virtuálního světa*. Česká andragogická společnost.

Veteška, J. et al. (2013). *Trendy a možnosti rozvoje dalšího profesního vzdělávání*. Praha: Česká andragogická společnost.

Weindenseld, Y. & Bashevis, Y. (2013). *Professional Development: Perspectives, Strategies and Practices*. Nova Science Publishers.

## Acknowledgment

This paper was supported by COOPERATIO (programme of Charles University, Faculty of Education, 2022-2026).

## Contact details:

PhDr. Michaela Tureckiová, CSc., MBA  
Department of Andragogy and Educational Management  
Charles University, Faculty of Education  
Myslíkova 7  
110 00 Prague 1, CZECH REPUBLIC  
E-mail: michaela.tureckiova@pedf.cuni.cz

---

# COMPETENCES OF THE FUTURE – NEW JOBS, NEW PROFESSIONS: FOREWORD ARTICLE

---

Zofia Szarota

## Abstract:

The text is an attempt to look at the dynamics of social trends from the perspective of new work, new professions and competences necessary for the future. It addresses the questions: what new competences are necessary for full participation in the future, how will work change, what professions will appear in the near "tomorrow" in the light of selected social trends (artificial intelligence, metaverse, silver tsunami)? The content is derived from the analysis of existing data (archival research, web mining) from publicly available and commissioned expert reports.

## Key words:

future, change, learning, competences, new jobs, new professions

## 1 INTRODUCTION – FUTURE 5.0

Humanity is at the turn of successive epochs of socio-economic development. After historical societies 1.0, 2.0, 3.0, the time has come for a pan-global era of economy 4.0 and society 5.0. The fourth technological revolution, civilisational progress, dynamic socio-cultural transformations determine a new shape of socio-economic life, completely different from the already familiar one. Humanity is at the turn of successive epochs of socio-economic development. The over-symbolic economy of the third wave, in which knowledge and information were the basis, and the dominating services were intellectual work and services, changed the perception of the labour market, as well as its services and products. It is noteworthy that it is not the development of the economy but the Covid-19 pandemic that has influenced the popularisation or even commonisation of home office / work and distance education.

The coming formation of 5.0, called the age of imagination, will perhaps provide humanity with an opportunity to return not only to the idea of humanism, but to tangible actions for human well-being. For it is „A human-centered society that balances economic advancement with the resolution of social problems by a system that highly integrates cyberspace and physical space” (Society 5.0 (cao.go.jp)). Society 5.0 will enable big data, artificial intelligence and robots to perform or support activities that have so far been performed by humans. It is a model of human relations that exploits the potential of technology and artificial intelligence, a human-centred digital humanism that serves the well-being of people.

Artificial intelligence (AI) will help solve the big social problems of the future. This will be made possible by augmented reality technology and the ubiquity of the cyberworld of tomorrow - the "metaverse" the successor to virtual reality (Caulfield, 2021). However, it is important to look at the problem critically, as it presents both challenges and opportunities. Many advise caution and prudence in approaching AI, which in their view may prove to be the greatest existential threat to humanity (Pracownik przyszłości, 2019, p. 11). In the 5.0 formation, new quality social issues will arise, which will require the implementation of technological solutions and social innovations, for which new legal and organisational regulations, qualifications and competences, different from those of today, will be necessary.

## 1 QUESTIONS ABOUT NEW COMPETENCES

Living in a 4.0 society, we are still not ready for immersive participation. Digitisation, information and communication technologies (ICT) are shaping the external conditions of functioning. Many of us struggle to find our way in indirect interpersonal communication settings - around 40 per cent of adults in the EU can be seen as being at risk of digital exclusion (European Commission/..., 2021, p. 34). A basic "competence (of) the future" is the ability to acquire new competences that will prove indispensable in the future. In what "schools" and how will they be acquired?

An evolution in educational processes and their social functions is needed (Szarota, 2019, p. 144), leading to the acquisition of key competences for lifelong learning, in particular in information literacy and digital competence (European Commission/..., 2021, p. 32-34), as well as social and learning competences. This is all the

more important because the phenomena of blocking technical and civilisational progress have the approval of society. We increasingly disregard the practical value of scientific knowledge and observation. Steven Pinker (2018) argues that the work of around 100 scientists has saved the lives of around 5 billion people. He points to the eradication of smallpox, polio, measles, etc. through vaccines, the momentousness of the discovery of penicillin and the rigour of asepsis, the chlorination of water, and many other achievements of scientists. Meanwhile, knowledge of these groundbreaking discoveries and inventions is non-existent in society.

The unverified stream of information flowing from the Internet can lead to getting lost in the chaos of data and opinions. It is therefore important to competently multiply personal intellectual resources, based on the following factors: know-what, know-why, know-how, know-who (cf.: Przyszłość edukacji..., 2021, p. 50). Lifelong learning has to be a process corresponding not only to the needs of the labour market, but also to individual expectations, abilities, interests, life plans. It is necessary to personalize the content and strategy of learning. The learning process itself will have a hypertext character. People will be given the opportunity to navigate a range of opportunities, they will be given the chance to participate fully in open education and, if the work survives, they will continually profile their own professional CVs.

Networked learning communities, which are already attractive learning environments, will grow. Education will become an intellectual pastime. The task of educators – tutors – facilitators will be to arouse motivation to acquire and deepen knowledge, to search for answers to all questions. Intelligent programmes will not be able to compete with professors in terms of master - student relations. It will be necessary to return to the idea of humanism: „[...] AI will require that even more people specialize in digital skills and data science. But skilling-up for an AI-powered world involves more than science, technology, engineering and math. As computers behave more like humans, the social sciences and humanities will become even more important. Languages, art, history, economics, ethics, philosophy, psychology and human development courses can teach critical, philosophical and ethics-based skills that will be instrumental in the development and management of AI solutions. If AI is to reach its potential in serving humans, then every engineer will need to learn more about the liberal arts and every liberal arts major will need to learn more about engineering.” (Smith, Shum, 2018, p. 18).

Business attention is shifting towards soft competencies. Experts point to four categories of skills most relevant in the not-too-distant perspective of 2025. These are: 1) problem solving, 2) managing oneself, 3) working with people, 4) using and developing technology. The first category includes competences concerning analytical thinking and innovation, solving complex problems, critical thinking and analysing, creativity, originality and initiative, reasoning, problem solving and formulating ideas. The second group includes active learning and learning strategies, resilience, stress tolerance and flexibility. The third category is about leadership and social influence, while the fourth is about using, monitoring and controlling technology (The Future of Jobs Report, 2020).

Skills in the area of science and natural sciences, the so-called STEM skills (science, technology, engineering, mathematics) must be enriched with soft competences. People who want to learn and are able to teach others - teachers, advisors, consultants – will be highly valued. A readiness to change profession at any time of life will be expected. The learning process and the work process are nowadays identical processes of human competence development in the work environment. Nearly 3/4 of adult education is related to the workplace. Adult education is currently positioned as a way to serve economic needs (UNESCO, 2019). Well-paid people with stable jobs have regular opportunities for learning and professional development, while opportunities for those with the greatest need for education and training are limited (Boeren, Roumell & Roessger, 2020).

## 2 NEW JOB, NEW PROFESSIONS

You don't need a glass ball for divination to tell you that today's children are learning for the future. 65% of children born after 2007 will work in professions that have not yet been created, while 47% of current professions will disappear from the labour market. The fourth industrial revolution, economy 4.0, eliminates some professions, but at the same time opens up space for new professions and new forms of employment. The rapid digitalisation of work resources and the expansion of remote working was the intention of 84 % of employers in 2020. They intend to move 44 percent of their employees to remote working (The Future of Jobs Report, 2020, s. 5). In the conditions of the 'new work', it will be necessary to reform education, the labour market, develop strong ethical principles and change the law. It will be

necessary to adapt one's own home to the conditions of remote work with the use of virtual space (holodeck) and to learn how to organise the space and time of work at home. Non-standard forms of employment and work will become common: crowd work, employee sharing, job sharing and home office, ICT-based mobile work. A scenario of alternating periods of intensive and less intensive work is very possible. Several times in the course of one's life, everyone will have a gap time, i.e. a break from work (a year, a few months), during which they will focus on education, changing profession or gaining experience.

Career guidance will become important as a strategy for strengthening career resources, aligning guidance activities with lifelong guidance (Rosalska, 2020, p. 159–160).

One of the rapidly growing social trends is the "silver tsunami" (Mapa Trendów, 2021). Demographic projections indicate that by 2050, one in three Europeans will be 60 or older. The price of a long existence is the feeling of loneliness and the medicalisation of the needs of increasingly elderly people and the increased need for medical, hygienic and social care services and the company of another human being. As a result of decreasing family caring capital, the health and safety of the elderly will be ensured by electronic wristbands for life, services will be provided by personal robots, humanoids and doctors' avatars, emotional needs of lonely seniors will be met by avatars of family members and phantoms of friends.

The growing number of older people will generate new phenomena in all areas of our lives, from housing and architecture to education, edutainment, leisure and communication solutions and health and care. The silver economy will also impose new solutions on the labour market. There is a risk that due to the intensity of population ageing, in some countries the length of professional activity will be significantly extended, as it will become an economic necessity for national economies. Delayed retirement will become common (the phenomenon of working forever, unending employee), integration and professional reintegration of elderly people will become more widespread.

Each social trend is followed by educational challenges. In the case of ageing societies, there is a need to establish new specialties and fields of study, modernise existing activities and establish new professions. Mechanisation, automation, robotisation are changing traditional professions, triggering innovations in (tele)

medicine, (tele)care, (tele)services. New professions are emerging, such as recreation planner, leisure time planner, virtual animator – elderly person's assistant, instructor of physical activities for seniors, medicines programmer, psychogerontologist, geragogic coach (economic, psychological, law, health, diet – nutritional treatment assistant, consumers, technological), meaning of life consultant, end of life planner. The profession of digital death manager is one whose name may be frightening, but if we realise how many users there are of digital platforms and social media, it becomes obvious that someone must be professionally involved in closing down the profiles of the deceased. In 2021, there were 4.88 billion internet users worldwide, accounting for 61.8% of the human population (Digital 2021).

The labour market is undergoing dynamic changes from the perspective of employers, employees and job seekers (Solarczyk-Ambrozik, 2016). The new labour ecosystem is flexible, prone to rapid change. Labour market claims are for skills that are in demand at any given time. The effectiveness of work is constantly quantified. Diplomas do not count, verifiable skills are important.

Digital civilisation, robotisation, automation are causing a decline in demand for human labour. The end of clock cards and the adaptation of the economy to distance working has brought about the prevalence of flexible working hours and flexible forms of employment, freedom of space and location for professional tasks: flexible working time, people per hour. Labour productivity started to be measured by its effects (results of work). People can work simultaneously for multiple employers, providing services in the Hollywood model<sup>2</sup>, pursue so-called polygamous careers (Belsky, 2021), which will see professionals with a professional portfolio of completed projects not tied to a contract with any of the many employers, allowing them to "rent" their own competences and work together in a loosely linked expert network. Thus, they will become contractual nomads following all boundaries (personal, professional, real and virtual, formal and informal, geopolitical, local and global) to where there is work to suit them. This can lead to a blurring of the boundaries between professional and private life, most often at the expense of private life.

Globalisation processes shape the labour market. National economies create supranational structures, preferring cooperation abroad (networking). Intensive integration processes take place, international corporations, concerns and cartels

---

<sup>2</sup> In the Hollywood Work Model, a project is identified and a team is assembled; it works together for precisely as long as is needed to complete the task; then the team disbands.

(coworking) are formed. Talent scouts are looking for employees with narrow specialisations, a global professional elite (knowledge class). Work using remote, digital tools is independent of geographical location. There is a growing group of so-called freelancers, defined by the saying: work is not a place, but what you do.

### 3 CONCLUSION

Workers who are deprived of control over their work and its products do not derive satisfaction from their tasks (telemarketers, cashiers at hypermarkets and motorway gates, people working at production belts, etc.). Remote workers have a sense of alienation, social loneliness (Davis, Cates, 2013). This condition can negatively affect the psychological well-being of professional users of new technologies. Is there a way around this? There is not yet much research on the effects of experiencing loneliness at work (Silard, Wright, 2020; Wright, Silard, 2021). It can be assumed that new professions will be needed, such as ABA therapist, which is a type of therapy that focuses on improving specific behaviours such as social skills. Another profession will be the communications or chief happiness officer, i.e. a person whose task is to increase the sense of happiness among employees of a given company (Pracownik przyszłości, p. 39 et seq.). Their task will be to mitigate the psychological effects of social isolation.

As a result of meeting social needs, the processes of de-alienation of work will most probably intensify and for example local small trade and service solutions will return. Socially "intensive" work, based on direct contact, will be revived. A cinematic example of the importance of the problem can be found in the film work entitled "Vratné lahve", 2007, directed by Jan Svěrák. It is not about the plot of the film, but about the presentation of the value of work for human communication, contact, mental and emotional well-being of the individual. After all, this is what society 5.0 is all about.

Digital intelligence, augmented virtual reality will provide humanity with new stimuli. The vision of a beautiful future 5.0, a world of imagination, a digital space where a person can be synchronously at work, socially connected, entertained and pursue their passions in an instant, is tempting. The Internet is a powerful environment, the new digital world of the metaverse will provide people above all



with illusions, surrogate experiences, avatars of friends. It will be easy to get lost in it. The Covid-19 pandemic proved that what we crave most is contact with another person, time spent together, informal communication and meetings with friends. Beyond the digital, soft, social competences will remain important. Changes are taking place on many other levels, the reality of tomorrow is difficult to imagine. However, we should try to anticipate it.

## References

- Belsky, S. (2021). 10 Forecasts For The Near Future Of Tech, Dec 31. <https://medium.com/positiveslope/10-forecasts-for-the-near-future-of-tech-61e73b51647c>
- Boeren, E., Roumell, E. A., & Roessger, K. M. (2020). COVID-19 and the Future of Adult Education: An Editorial. *Adult Education Quarterly*, 70(3), 201–204. <https://doi.org/10.1177/0741713620925029>.
- Caulfield, B. (2021). *What Is the Metaverse?* August 10. <https://blogs.nvidia.com/blog/2021/08/10/what-is-the-metaverse/>
- Davis, R. and Cates, S. (2013). The Dark Side of Working in a Virtual World: An Investigation of the Relationship between Workplace Isolation and Engagement among Teleworkers. *Journal of Human Resource and Sustainability Studies*, 1, 9-13. doi: 10.4236/jhrss.2013.12002.
- Digital 2021: Global Overview Report. (2021). Hootsuite. <https://datareportal.com/reports/digital-2021-global-overview-report>
- European Commission/EACEA/Eurydice, 2021. *Adult education and training in Europe: Building inclusive pathways to skills and qualifications*. Eurydice Report. Luxembourg: Publications Office of the European Union. <https://data.europa.eu/doi/10.2797/898965>
- Mapa Trendów (2021). Infuture Institute. <https://infuture.institute/mapa-trendow/Metavers>. [en.wikipedia.org/wiki/Metaverse](https://en.wikipedia.org/wiki/Metaverse)
- Pinker, S. (2018). *Enlightenment Now: The Case for Reason, Science, Humanism, and Progress*. New York: Published by Viking.
- Pracownik przyszłości* (2019). Infuture Hatałska Foresight Institute: Gdańsk. [infuture.institute](https://infuture.institute)
- Przyszłość edukacji. Scenariusze 2064* (2021). [infuture.institute](https://infuture.institute), Collegium da Vinci. [infuture.institute](https://infuture.institute)
- Rosalska, M. (2020). Empowerment jako strategia wzmacniania zasobów karierowych. In: *Edukacja dorosłych a planowanie karier edukacyjno-zawodowych*. E. Solarczyk-Ambrozik, M. Christoph, R. Konieczna-Woźniak (ed.). Poznań: Wydawnictwo Naukowe UAM, 159-170.

Silard, A, Wright, S. (2020). The price of wearing (or not wearing) the crown: The effects of loneliness on leaders and followers. *Leadership*. 16(4): 389-410. doi: 10.1177/1742715019893828

Smith, B., Shum, H. (2018). *The Future Computed: Artificial Intelligence and its role in society*. Microsoft Corporation Redmond, Washington. U.S.A. <https://blogs.microsoft.com/blog/2018/01/17/future-computed-artificial-intelligence-role-society/>

Society 5.0 (cao.go.jp), Japan Cabinet Office, [opened 6.07.2021]

Solarczyk-Ambrozik, E., (2016). Labour market orientation in lifelong learning strategies. in: *Lifelong learning for Labour market needs*, E. Solarczyk-Ambrozik (ed.). Poznań: Wydawnictwo Naukowe UAM, p. 11-30.

Szarota, Z. (2019). Tasks and Social Functions of Adult Education in the Perspective of Learning in Adulthood, *Pedagogika Społeczna*, 2: 133-148. [https://www.researchgate.net/publication/336305902\\_Tasks\\_and\\_social\\_functions\\_of\\_adult\\_education\\_in\\_the\\_perspective\\_of\\_learning\\_in\\_adulthood](https://www.researchgate.net/publication/336305902_Tasks_and_social_functions_of_adult_education_in_the_perspective_of_learning_in_adulthood)

*The Future of Jobs Report 2020* (2021). World Economic Forum. <https://www.weforum.org/reports/the-future-of-jobs-report-2020/>

UNESCO (2019). *4th Global Report on Adult Learning and Education: leave no one behind: participation, equity and inclusion*. <https://unesdoc.unesco.org/ark:/48223/pf0000372274>

Wright, S., Silard, A. (2021). Unravelling the antecedents of loneliness in the workplace. *Human Relations*. 74(7):1060-1081. doi:10.1177/0018726720906013

#### Contact details:

Zofia Szarota, PhD, associate professor  
ORCID: 0000-0002-6342-3135  
Katedra Pedagogiki  
University WSB,  
ul. Cieplaka 1 C  
41-300 Dąbrowa Górnicza, POLAND  
E-mail: zofiaszarota@gmail.com

---

## SATISFACTION OF HIGH SCHOOL GRADUATES WITH THEIR SCHOOL

---

Roman Liška, Džalal Nazarov

#### Abstract:

One of the most useful tools of quality management in schools is regular monitoring of past students' satisfaction with the quality of the school and the education it provides, along with researching their professional preferences and their value on the job market. Targeted and long-term monitoring of past students can reveal non-compliance of education with the requirements of the current labour market. Tracing statistics allows the school management to monitor the effectiveness and quality of education provided both during and after the course. The aim of this survey was to analyse the level of satisfaction of past high school students with the school they graduated from and the quality of its teaching.

#### Key words:

Graduate, Labor market, Satisfaction, School, Quality

## 1 INTRODUCTION AND THEORETICAL FRAMEWORK

Despite its frequent use in many different contexts, the concept of quality is perceived in a variety of ways, typically depending on the context in which quality is mentioned. Considering how problematic it is to define quality in the general sense, it is no less difficult to define quality in the context of education. Rýdl (2002) states that applying a uniform model of quality assessment in education is extremely difficult, even while maintaining generality of such a model. Janík (2013), Veteška (2016) and Kursch (2021) argue similarly, pointing out that since different actors define quality differently with regards to their interests, it is difficult to achieve a unified understanding of the term. Nevertheless, it is still important to define and systematically evaluate quality in education (Schindlerová et al., 2015).



Quality at school can be understood absolutely or relatively. In the former case, the quality of educational processes is perceived as the desired level of functioning or production of these processes. Those levels can be set by certain requirements and can therefore be objectively measured and evaluated (Průcha, 1996). The latter case consists of tools for excellence based on the transformational concept of quality, which is related to the continuous improvement and transformation of the school, rather than the system and procedures (Sallis, 2002). The main goal of the school in this sense is the satisfaction of its customers.

However, student satisfaction is not a homogeneous and sufficiently researched concept. Findings (Wiers-Jenssen et al., 2002; Richardson, 2005) show that student satisfaction can be strongly influenced by a number of contextual factors without being connected to quality of teaching. Conversely, Aldridge (2016), Čapek (2010), Corradino and Fogarty (2016) and others perceive student satisfaction as one of the indicators of quality and draw attention to its impact on student engagement, educational outcomes and access to education. Monitoring satisfaction of secondary school students after they graduate was often not a priority. Tracing them after graduation was not always easy. If schools wanted their graduates to take part in a survey, they often had to rely on the graduates themselves to stay in contact. However, with the development of the Internet, social networks and communication technologies in general, graduate tracking is becoming easier and, thanks to the possibilities of electronic questionnaires, fast, efficient and user-friendly.

Collection of feedback from past students is commonly used as a quality management tool and has even been recommended by legislation since 2017 (Council Recommendation C 423/01, 2017) in the field of secondary education. This survey is even more relevant considering the present situation, where according to the findings of TIMMS 2015 and the latest WHO Health Behavior in School-aged Children (HBSC) survey, the satisfaction of Czech students with their school is the lowest among the monitored countries and the positive feelings of students associated with school attendance are declining (Inchley et al., 2020).

## 2 METHODOLOGY

The aim of this survey was to analyse the level of satisfaction of past high school students with the school they graduated from and with the quality of its teaching. The partial goal was to research how well does the education the school provides enable graduates to successfully establish themselves on the labour market or study at university. In addition, the survey included a comparison of past students' opinions with secondary data, which the monitored school has been obtaining since 2010 in the form of annual surveys of students on school satisfaction and quality of teaching.

The data currently obtained were compared with aggregated data obtained in the year in which the school conducted its own satisfaction survey. The questions compared were exactly the same in both questionnaires. Verification of the following assumptions were carried out during the survey: the degree of satisfaction of graduates with their school and the quality of teaching as well as the influence of the time passed since graduation.

### 2.1 Research sample

The survey was conducted on a sample of 226 graduates of a public secondary school established by the capital city of Prague. Only 26 graduates from the school years 2010/2011 to 2014/2015 took part in the survey, therefore these data were excluded from the survey and data from 200 respondents from 2015–2020 were used. The school at which the survey was conducted divides students into five educational programs of the "M" category, all of which provide secondary education with a school-leaving examination at the end. The capacity of the school is 900 students with about 200 students graduating every year. The Czech School Inspectorate praised the school as an "example of good practice" and considers its main strengths to be "quality teaching", "school climate", "students' results in graduation exams", "material conditions for education", "ICT equipment", "applicant interest", "mutual respect and open communication" and "school image and marketing".

2,036 past students who graduated in the years 2010–2020 were contacted by email, using contact addresses from the school databases. 186 e-mails were returned as undeliverable, and 1,624 graduates did not respond to repeated calls. All respondents were involved in the survey, none of the questionnaires were excluded. The low

number of respondents is one of the limits of the survey and is reflected in the discussion part. The structure of the respondents is shown in Table 1.

**Table 1: Structure of the respondents**

Year of graduation	Number of students
2010 to 2014	9
2014/2015	17
2015/2016	19
2016/2017	28
2017/2018	41
2018/2019	37
2019/2020	75
<b>Total</b>	<b>226</b>

*Source: own processing*

## 2.2 SURVEY METHOD

Data collection was carried out from 2 to 20 November 2020. A questionnaire containing 21 questions was created, seven of which were open-ended. The questionnaire was not anonymous, graduates were identified by name, completed educational program and year of graduation. The questionnaire consisted of questions determining satisfaction with the school attended, its quality of teaching and how well does the education the school provides prepare graduates for further study at university or joining the workforce. Furthermore, it asked whether, if given the chance, they would choose the school again. The open-ended questions asked about the type, form and degree of the completed university education, foreign internships within the Erasmus+ project and acquired professional competencies.

Respondents also provided information on their professional history and possible unemployment. Closed-ended questions were analysed using descriptive statistics in Excel. Averages and differences of answers were also calculated. The open-ended questions were evaluated qualitatively and because of their number, it was not necessary to code them. Due to the Covid-19 pandemic, the questionnaire was distributed electronically via the Microsoft Forms platform and also made possible to fill in via mobile phones. Respondents answered on a five-point Likert scale.

Prior to data collection, the questionnaire was piloted on a sample of thirty high school students.

## 2.3 RESULTS

Table 2, which presents calculations of averages of answers, reveals that in all monitored items the answers are above the middle of the scale (2.5 and more). Graduates from the 2015/2016 school year (4.74 and 4.59, respectively) express the greatest satisfaction with the school and its quality of teaching. On the other hand, the relatively lowest school satisfaction is expressed by recent graduates from 2019/2020 (4.19), the quality of teaching is rated the worst by graduates from 2017/2018 (4.05).

Respondents evaluated the preparation for further study at university the best in the school year 2018/2019 (4.3), the worst in 2017/2018 (3.51). Professional skill development was evaluated the best in 2016/2017 (3.11) and worst in 2018/2019 (2.65). When comparing the two monitored criteria, graduates evaluate the preparation the school provides for further study more positively than professional skill development.

**Table 2: Calculations of average values in individual items**

	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020
School satisfaction	4,74	4,32	4,24	4,48	4,19
Quality of teaching	4,59	4,11	4,05	4,43	4,13
Preparation for further education	3,68	3,79	3,51	4,3	3,92
Professional skill development	2,68	3,11	2,68	2,65	3,03

*Source: own processing*

Table 3 illustrates the "r" correlation calculations, which were performed on graduate data using the Pearson correlation coefficient and showed a strong linear relationship between the quality of teaching and the graduates' school satisfaction (0.950). Students perceive a relatively weak relationship between the quality of teaching and the contribution of the acquired knowledge towards their further university studies (0.328). There is almost a zero linear relationship between school satisfaction and

the contribution of the acquired knowledge towards their further university studies (0.085). It is interesting to compare the dependence between contribution of the acquired education towards work and school satisfaction and quality of teaching, as it even reveals a negative dependence (-0.537 and -0.560, respectively).

**Table 3: Correlation of individual monitored items**

	Quality of teaching	School satisfaction	Contribution of acquired knowledge toward further study	Contribution of acquired knowledge toward work
Quality of teaching	1	0,950	0,328	-0,560
School satisfaction	0,950	1	0,085	-0,537
Contribution of acquired knowledge toward further study	0,328	0,085	1	-0,028
Contribution of acquired knowledge toward work	-0,560	-0,537	-0,028	1

*Source: own processing*

Answers to the open-ended questions brought beneficial findings. Among the most frequent answers to the question of what do you consider to be the most beneficial thing your high school offered, the graduates answered: foreign language education, professional and foreign internships, teacher approach, study of practical subjects, emphasis on student independence, quality teaching or the preparation for further university study. Graduates would welcome a larger number of lessons or seminars about things usable in real-life professions or a better connection between theory and practice.

They are satisfied with the teaching. Everyone evaluates it as good, with 92 % of respondents saying they would choose the same high school again. Regarding respondents who pursued further education, 90 % of them continued their full-time studies at universities, 10 % of respondents chose private schools. Preferred universities included Charles University, Czech University of Life Sciences Prague, Czech Technical University in Prague, Prague University of Economics and Business or the University of Chemistry and Technology Prague. Of the private schools, graduates most often voted for the University of Economics and Management Prague and NEWTON University – University of Applied Business. The most common fields were economics and management, law, humanities and media and creative fields.

The comparison of individual answers with secondary data, which the school has been obtaining through a standardized questionnaire since 2015, brought interesting results (Table 4). In all monitored items, students evaluate their school satisfaction and the quality of the school better than at the time they attended the school.

**Table 4: Comparison of responses across time**

	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020
School satisfaction – students after graduation	4,74	4,32	4,24	4,48	4,5
Student satisfaction – students enrolled at the time	3,85	3,92	4,05	4,30	4,4
Teaching quality – students after graduation	4,59	4,21	4,05	4,43	4,21
Teaching quality – students enrolled at the time	4,04	3,96	3,92	4,32	4,12

*Source: own processing*

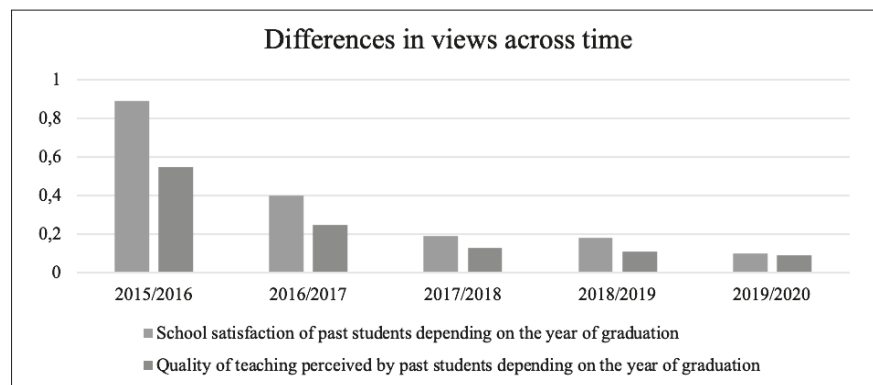
This fact is further evident in Table 5 and Graph 1, which indicate that the longer the time since graduation, the higher the satisfaction with school and quality of teaching. Students and graduates from 2019/2020 have the smallest difference in opinions on satisfaction (0.1) and quality of teaching (0.09). On the contrary, the biggest differences are between students and graduates from 2015/2016 (0.89 satisfaction and 0.55 quality of teaching). The shorter the time since graduation, the smaller the difference in responses.

**Table 5: Differences in views across time**

Differences	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020
School satisfaction of past students depending on the year of graduation	0,89	0,4	0,19	0,18	0,1
Quality of teaching perceived by past students depending on the year of graduation	0,55	0,25	0,13	0,11	0,09

*Source: own processing*

Graph 1 Differences in views across time



Source: own processing

### 3 DISCUSSION AND CONCLUSIONS

Many secondary schools are looking for tools through which they can monitor and verify the quality of their education. One of these tools is to determine the satisfaction of graduates with their school and the quality of its teaching. Through the tracing of graduates, schools can discover information directly related to the students' perception of school satisfaction and school quality, along with a number of other facts related to topics such as quality of the school curricula, internships, foreign and extracurricular activities. Information about the integration of graduates into the labour market, career advancement and further continuation of studies may also prove interesting.

Although obtaining feedback from graduates tends to be more focused on the tertiary level of education, it also has positive effects when conducted at lower levels. Despite the limits typical of retrospective studies, this survey conducted on a sample of 200 graduates of a Prague secondary school yielded interesting results. Although the results cannot be interpreted causally, it became clear that graduates and students who had evaluated their satisfaction with the school and the quality of teaching in the given years, rate it above the average of the five-point Likert scale. In this regard, previously published surveys (Liška & Veteška, 2021) stating that Czech high school students are not dissatisfied with their schools and

the assumptions made have both been confirmed. In addition to several responses that provided the school management with useful feedback on teaching quality, learning effectiveness, hidden curriculum identification, school development and graduate employment, Pearson's correlation coefficient calculations suggest that graduates do not deem the contribution of the high school education provided to them as extremely important toward their future study or work.

When comparing the retrospective evaluation with the evaluation in the actual year, the influence of the passed time on respondents' opinions became clear. The longer the time since graduation, the more positive graduate evaluation of the school. It would be too daring to speculate upon the reasons for this finding (factors such as the displacement of negative experiences, idealization of the past based on negative experiences in the present, situational factors, etc.), but this information may prove important to schools since it allows the school management to perceive the school's quality more comprehensively. This investigation has its other limits. An indisputable limitation is the selection of the sample. The survey was conducted on a limited number of graduates of one secondary school. It can be assumed that with a different number of respondents and sampling, different conclusions could be drawn. It would therefore be appropriate for follow-up research to work with a larger number of respondents from more schools and to carry out surveys repeatedly, so that the results of the survey can provide a more comprehensive picture of the quality and effectiveness of the current education.

## References

- Aldridge, J. M., Fraser, B. J., Fozdar, F., Ala'i, K., Dantas, J., & Afari, E. (2016). *Students' perceptions of school climate as determinants of wellbeing, resilience and identity*. *Improving Schools* 19 (1): 5–26
- Corradino, C. & Forgarty, K. (2016). *Positive emotions and academic achievement*. Applied psychology opus. New York University. Retrieved from <http://steinhardt.nyu.edu/appsyh/opus/issues/2016/spring/>
- Čapek, R. (2010). *Třídní klima a školní klima*. Praha. Grada.
- Doporučení Rady ze dne 20. listopadu 2017 o sledování uplatnění absolventů (2017). *Úřední věstník Evropské unie*.
- Inchley, J., Currie, D., Budisavljevic, S., Torsheim, T., Jåstad, A., & Cosma, A. (2020). *Spotlight on adolescent health and well-being: Findings from the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey in Europe and Canada: International report*. Retrieved July 08, 2020, from <http://www.hbsc.org/publications/international/>.
- Janík, T. (2013). *Kvalita (ve) vzdělávání: obsahově zaměřený přístup ke zkoumání a zlepšování výuky*. Masarykova univerzita.
- Kursch, M. (2021). Impact of a One-Off Demonstration on the Use of ICT in the Teaching of Andragogy Students on Their Change of Attitude Towards the Use of ICT in Education. *International Journal of Cognitive Research in Science Engineering and Education-IJCRSEE*, 9(1) 121-134. DOI: 10.23947/2334-8496-2021-9-1-121-134.
- Liška, R., & Veteška, J. (2021). Komparace spokojenosti **žáků škol** využívajících systémy řízení kvality s **žáky běžných škol**. *e-Pedagogium*, 21(3), 20–41
- Průcha, J. (1996). *Pedagogická evaluace: hodnocení vzdělávacích programů, procesů a výsledků*. Brno: Masarykova univerzita.
- Richardson, J. T. E. (2005). Instruments for obtaining student feedback: A review of the literature. *Assessment & Evaluation in Higher Education*, 30(4), 387-415.
- Rýdl, K. (2002). K pojetí kvality ve **školství** a jejímu hodnocení. *E-Pedagogium*, 2(1), 104–123.
- Sallis, E. (2002). *Total quality management in education*. Sterling, VA: Stylus Pub.

Schindler, L., Puls-Elvidge, S., Welzant, H., & Crawford, L. (2015). Definitions of Quality in Higher Education: A Synthesis of the Literature, 5(3), 3–13. <https://files.eric.ed.gov/fulltext/EJ1132898.pdf>.

Veteška, J. (2016). *Přehled andragogiky: úvod do studia vzdělávání a učení se dospělých*. Portál.

Wiers-Jenssen, J., Stensaker, B. & Grøgaard, J. B. (2002). Student satisfaction: towards an empirical deconstruction of the concept. *Quality in Higher Education*, 8(2), 183–195. DOI: 10.1080/ 1353832022000004377.

## Acknowledgment

This paper was supported by COOPERATIO (programme of Charles University, Faculty of Education, 2022-2026).

## Contact details:

PhDr. Mgr. Roman Liška, Ph.D., MBA  
Department of Andragogy and Educational Management  
Faculty of Education, Charles University in Prague  
Myslíkova 7  
110 00 Prague 1, CZECH REPUBLIC  
E-mail: [roman.liska@pedf.cuni.cz](mailto:roman.liska@pedf.cuni.cz)

---

# CURRENT TOPICS OF PROFESSIONAL DEVELOPMENT OF ACADEMIC STAFF IN THE MIRROR OF THE ASSESSMENT OF THEIR PEDAGOGICAL COMPETENCIES

---

Petr Adamec, David Kryštof

## Abstract:

The aim of this paper is to present the partial results of a survey carried out within the framework of the institutional plan project at a public university in the Czech Republic aimed at the development of strategic human resource management and career development of employees. One of the objectives of the project was to develop and validate competency models for different types of academic staff. The paper focuses on the results of the validation of a common area of competency models, which was related to their pedagogical competencies.

## Key words:

academic staff, competency models, pedagogical competencies, professional development, evaluation

## 1 INTRODUCTION

Universities are not only currently, but have been for a long time, facing many problems, which can be understood in both; positive and negative terms. The general problems of the higher education environment include, for example, low successful studies completion rates, problems with the quality of education, inequalities in the chances of attaining a university education, partial underfunding, internal management and economy rules of universities and their stuck or inefficient self-governance, forms of entrance examinations or the proportion of university educated people in the population, and other problems. One of the problems is also inbreeding, which, although it varies among schools, faculties or disciplines, nevertheless this negative phenomenon does exist.



An equally interesting area is the evaluation of scientific output, of which system is certainly not optimal and affects the work of academic staff, their motivation and, above all, drastically affects the quality and quantity of their teaching activities. Some of the above listed problems are also related to lower levels of education – as an example we can mention the readiness of students for university studies, especially in areas (subjects) that are now generally referred to as STEM (Science, Technology, Engineering, Mathematics) (cf. Matějů, 2009).

The fact remains, however, that one of the most important factors in the higher education environment are academics who are on the 'front line' and, in our view, it matters a great deal how they do their work, to what extent they are motivated to do it (especially internally), and whether they have opportunities to develop further in their profession. The topic of professional development of employees in the field of (not only higher) education, but human resource management in general, or talent management in particular, should be intensively promoted and researched in this context, and some professional teams have been working on these topics for a long time (cf. Veteška & Kursch, 2018; Veteška & Tureckiová, 2020).

## 2 THEORETICAL BACKGROUND

The performance of the academic profession – a university teacher – is concentrated in two main activities that result from the functions of universities: pedagogical and scientific research. Their ratio is mainly influenced by the category of academic staff member, the type of institution and the scientific discipline. Pedagogical activity concretises one of the main functions of a university - the transmission of scientific knowledge to students in teaching. Scientific research activity is linked to the requirement for publication. These activities are recognised as the main criterion for assessing the quality of a university teacher and are a prerequisite for obtaining higher academic degrees. Pedagogical competencies of a university teacher are understood as a set of specific and highly expert knowledge, skills, attitudes and experiences that reflect the dynamics of educational processes in the tertiary sphere (Vašutová, 2002).

A university teacher should possess pedagogical, social, psychological and ethical skills. At the same time, they should have a profound command of didactic,

evaluative, organizational and management skills, the ability of self-reflection and further personal development, as well as the ability of adequate pedagogical communication in practice, including the provision of adequate support to the disadvantaged. These requirements are particularly important for early career teachers. Some universities focus on which conditions at universities need to be established so that academic teaching skills become relevant to the career of university teachers (Merkt, 2017; Trabalíková, 2020).

It is the Strategic Plan of the Ministry of Education and Science of the Czech Republic for the period from 2021 that envisages that universities will gradually ensure the development of pedagogical competencies of beginning academic staff (cf. Strategický, 2021). The research and discussions on the competencies in higher education primarily teaching competencies followed by research competencies, have been present for many years (Rončević, Turk & Vignjević, 2016). Consequently, demands on academic staff development continually emerge, which academics may view as oppressive (Deaker, Stein & Spiller, 2016). Early career academia is a challenging time, particularly as academics are facing increasing pressures to excel across a range of areas (Matthews, Lodge & Bosanquet, 2014).

## 3 INFORMATION ABOUT THE IMPLEMENTED PROJECT

Mendel University in Brno has subscribed to the principles enshrined in the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers. Subsequently, it was the first Czech university to receive the prestigious HR Award from the European Commission. This award obliges us to work actively to improve the quality of human resources management in order to comply as far as possible with the principles of the Charter and the Code (Evropská, 2006). From January to December 2021, a sub-project of the Institutional Plan entitled “Development of Strategic Human Resource Management at MENDELU in the field of career development of employees” was implemented at the University. The aim of the project was to design a system for continuous support of MENDELU staff training and development in key areas. The project activities were largely focused on a group of academic staff, including PhD students. The implementation of the project consisted of a number of sub-steps, which were linked or implemented in parallel. The most important activities included:



1. analysis of examples of good practice of education and development in foreign universities;
2. design and development of competency models for different types of academic staff;
3. validation of these competency models in quantitative and qualitative form;
4. design, development and implementation of pilot courses including their evaluation;
5. the design and development of a training and development concept for academic staff.

In the following text, which is based on the final report of the project (Adamec & Kryštof, 2021) we will focus on items 2 and 3 from the above listed activities, and in the context of the aim of this collection of papers, we will focus on the pedagogical competencies of academic staff.

There are a number of definitions of competencies. The word competency is used in management practice in a dual sense – firstly as a range of competencies and secondly as a capacity to act. In our case, we perceive competency in this sense as a set of knowledge, skills, experience that supports the achievement of the goal. Competencies are the observable means by which we achieve effective performance. The competency model then contains individual competencies, which are selected from all possible competencies and arranged according to some key (Hroník, 2007).

For the elaboration of competency models and the subsequent design of a comprehensive system of education of academic staff, we also used inspiration from foreign universities. The aim was to gain insights and inspiring examples of good practice from staff development systems in other academic departments. The criterion for the selection of individual departments was chosen based on the rating of colleges and universities of the main focus on agriculture and forestry. We used the QS ranking in Agriculture & Forestry and the Shanghai Ranking with a focus on Agriculture Sciences and Earth Sciences. For a brief analysis, we selected a total of 10 foreign universities and colleges.

## 4 CREATION AND VALIDATION OF COMPETENCY MODELS

For our purposes, we got inspired primarily by a model developed at The Pennsylvania State University that categorizes competencies by type of academic (Verderame et al., 2021). We adapted the model to the needs of the university and added attributes of competencies related to teaching activities. Thus, the competency models for the different types of academic staff comprise of nine areas, which are then content-adapted according to the individual level of academic staff (from lecturers to professors). These areas include: subject knowledge, responsible approach to scientific work, critical thinking skills, data handling skills (statistics), research ethics, communication skills, research and research team leadership, personal effectiveness, teaching.

For the purpose of project implementation, academic staff were divided according to the HR Award methodology into R1, R2, R3 and R4 groups, where R1 represents PhD students, R2 postdocs with potential for research activity, R3 junior researchers (in our terminology associate professors) and R4 senior researchers (in our terminology professors). At the same time, we identified a group that we refer to as A2. These are workers with PhD degrees who do not want to achieve other titles in the academic world (associate professor, professor) and do not have scientific ambitions in general. Their main focus is therefore (of their own choice) mainly on teaching activities, the scientific research area is neglected. We have separated category A2 from category R2 and focused on it from this perspective.

The proposed competency models for the different types of academic staff were subsequently validated. The aim of the validation of the competency models was both; to verify the set competencies and to pilot test the actual state of the competency levels of the selected academic staff across the university. The selection of respondents was carried out in collaboration with the representatives of the different university units working within the HR Award group. Respondents were selected evenly across categories (R1-R4 and A2) and university units. Ten respondents were nominated from each unit, i.e. two respondents from each category. The total number of respondents involved was therefore 60. We are of course aware that due to the total number of academic staff at Mendel University in Brno, this is not a representative sample.

## 5 METHODOLOGY FOR VALIDATION COMPETENCY MODELS

We chose the 270° feedback method for data collection. In our work, this method involved obtaining feedback from the respondent's direct supervisor, peers at the same level, and subordinates (e.g., research team members or supervised doctoral students). Based on the chosen method and the selected respondents, two types of questionnaires were developed. The first questionnaire was a form of self-evaluation, where respondents rated their own competencies, and the second questionnaire was subsequently sent to selected evaluators from among their colleagues, supervisors, etc. Competencies were rated on a scale of 0-10 %, 11-20 %, 21-30 %, 31-40 %, 41-50 %, 51-60 %, 61-70 %, 71-80 %, 81-90 %, 91-100 %, 101% and above. A scale of 101 % and above represented excellence means that the respondent's competency in a given area is above the required level. For the statistical processing of the data, the scale items were categorised and given numbers from 1 to 11. The questionnaires also included two open questions focusing on the evaluator's recommendations for development.

The overall success rate in completing both questionnaires was 80 %. Of the 60 people, 48 actively participated (9 A2, 10 R1, 9 R2, 11 R3, 9 R4). A total of 206 of their colleagues provided feedback on their competencies (39 A2, 42 R1, 41 R2, 43 R3, 41 R4). At the same time, 34 individual semi-structured interviews were subsequently conducted with individual academics who expressed interest in providing feedback on their own.

## 6 RESULTS OF THE VALIDATION OF COMPETENCY MODELS IN THE FIELD OF PEDAGOGICAL COMPETENCIES

In general terms, the proposed competency models could not be objectively compared, except in one area. Across all competency models, only the questions/items focused on the area of pedagogical competencies of academic staff were identical. Therefore, below is a comparison of this area across all categories of academic staff (A2, R1-R4). Table 1 below shows the competency groups defining the sub-competencies.

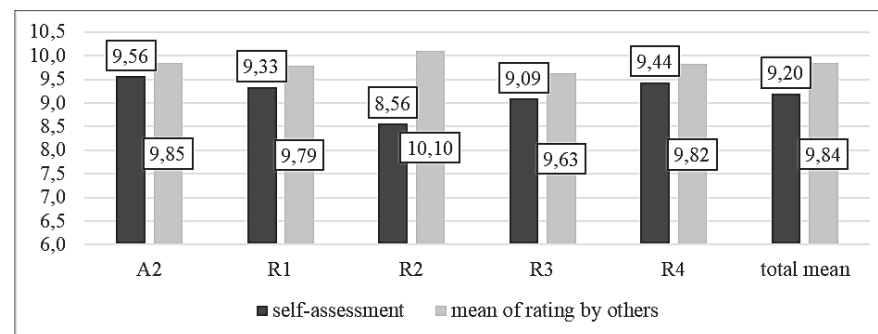
**Table 1: Definition of individual groups of pedagogical competencies**

<b>Competency group 1</b>	He/she is able to define educational objectives. Prepares teaching with regard to the target group, the objectives of the subject, the content and expected outcomes and the relationship of the subject to others. Knows and can prepare appropriate teaching forms and methods, teaching aids and other material didactic resources for each teaching topic.
<b>Competency group 2</b>	He/she appropriately structures teaching and its individual sections, combines methods and teaching aids. Responds to questions, explains the educational content in an appropriate way with regard to the target group. Is able to react to common problem situations in teaching (technique, environment, participants).
<b>Competency group 3</b>	He/she creates space for objective and fair evaluation of students. Formulates clear and specific questions (in oral examinations and written tests) that reflect the stated learning objectives.
<b>Competency group 4</b>	Together with students, he/she specifies the assignment of the qualification work, effectively sets the schedule, provides timely, structured and professional feedback.

*Source: author's own work*

The following charts show the mean self-assessments – i.e. the mean values by which the employees expressed their perception of themselves in the context of the given group of competencies and at the same time the mean ratings assigned by their colleagues (colleagues, supervisors, PhD students, etc.) within the given competency.

**Chart 1: Mean rating of competency group no. 1**

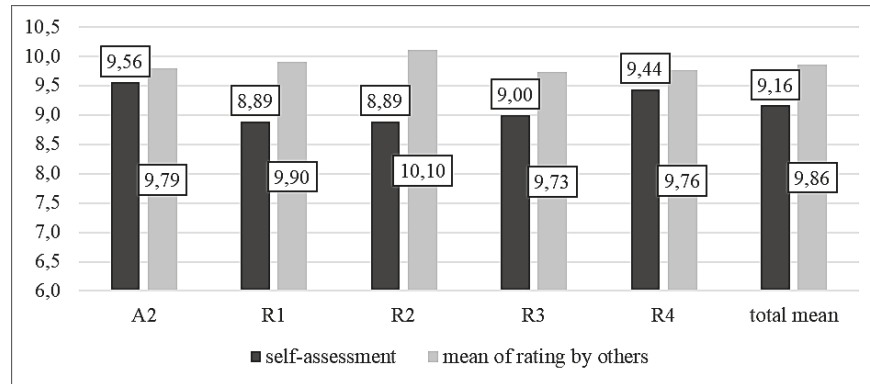


*Source: author's own work*

Within this set of competencies, the best mean self-assessment was given by the A2 group (9.56) and the worst mean self-assessment was given by the R2 group (8.56).

Paradoxically, the R2 group was on mean the best assessed by their colleagues (10.10) and the largest difference between self- and peer assessments was also found here.

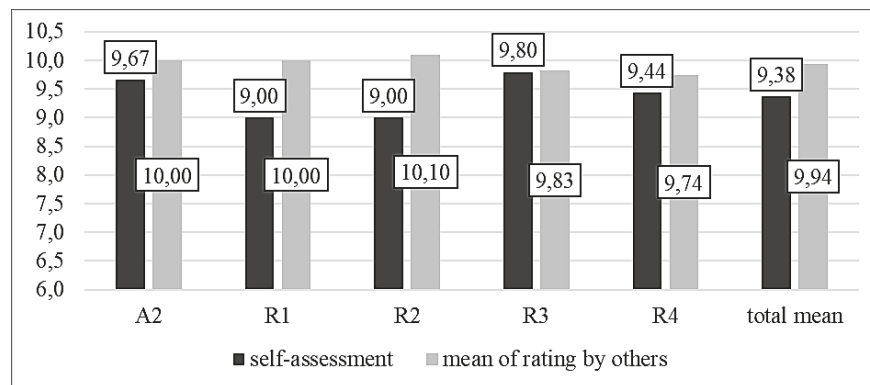
**Chart 2: Mean rating of competency group no. 2**



Source: author's own work

Within this set of competencies, the best mean self-assessment was again given by the A2 group (9.56) and the worst mean self-assessment was given by the R1 and R2 groups (8.89). The R2 group was again rated best on mean by colleagues (10.10) and again the largest difference between self-assessment and peer assessment was found in the R2 group (1.21).

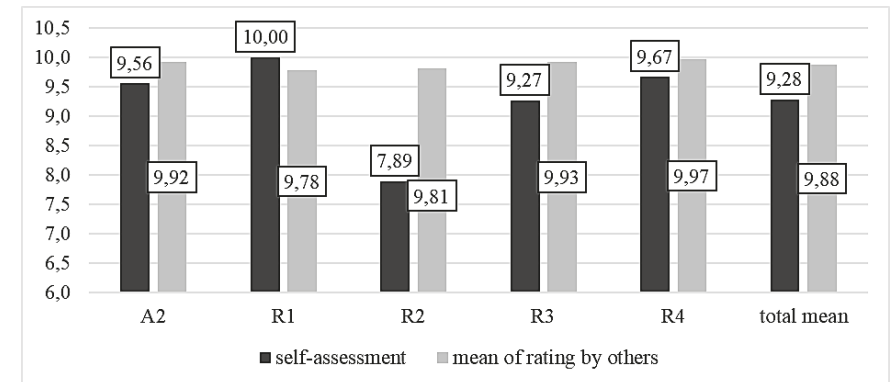
**Chart 3: Mean rating of competency group no. 3**



Source: author's own work

Within this set of competencies, the best mean self-assessment was given by the employees in group R3 (9.80) and the worst mean self-assessment was given by group R1 in line with R2 (9.00). On mean, the R2 group was rated the best by their colleagues and again, the largest difference between self-assessment and peer assessment would also be found here (1.1).

**Chart 4: Mean rating of competency group no. 4**



Source: author's own work

The results of the assessment within this group of competencies differ from the previous three in several respects. For the first time in the R1 group, we found out that the mean self-assessment is higher (10.00) than the mean environmental assessment (9.78). This group sees itself the best ever within this set of competencies. The R2 group then perceives itself the worst (7.89), while the R1 group has the lowest mean rating by the colleagues (9.78). For group R2, again, the biggest difference yet was found between the mean self-assessment and the mean peer assessment (1.92).

In particular, our findings show that academics rate their teaching competencies lower than their colleagues, supervisors or students. This is most evident in the R2 group members, who are the most 'undervalued' but at the same time are rated the highest by their peers.

## 7 SUMMARY AND CONCLUSION

Academic development is increasingly complex and multi-faceted, and highly contextual (Ragupathi, 2021). Academic development has been described as a fragmented enterprise as a means of recognizing the messy discursive terrain navigated by its subjects (Linguist, 2018). The professionalisation of teaching is of increasing importance in many countries at higher education due to converging processes including the proliferation of managerialism, increasing quality agendas and changes to student fee structures. Current literature suggests that a plethora of ideas, frameworks and instruments claiming best practice exist but that take-up of these is inconsistent. Current literature suggests that a plethora of ideas, frameworks and instruments claiming best practice exist but that take-up of these is inconsistent (Winter et al., 2017).

The competencies of a university teacher include not only scientific (professional) erudition, but also pedagogical competencies, which are necessary for transmission of professional knowledge to students and inspiring them to show deeper interest in the field. In the Czech legislative educational environment each of the academic staff must have the professional competence (certificated by a university degree for the given field of study) but they need not have so called pedagogical education (unlike teachers of primary and secondary schools) (Němejč & Smékalová, 2016). In some universities, not only in the Czech Republic or Slovakia, they have long ago come to the conviction that it is important to approach this issue systematically.

The role of effective teaching in the attainment of student outcomes is increasingly recognized and many engineering departments require faculty to meet standards of pedagogical competence (Winberg & Winberg, 2017). It is a common standard that modern universities have a department that provides university-wide education, professional and personal development of staff in a wide range of areas, including pedagogical and scientific research skills. On the basis of the results and activities of the aforementioned University Institutional Plan project, a concept for the training and development of different types of academic staff (including PhD students) and senior academic staff has been proposed. This concept of training and development of academic staff includes not only seminars or workshops, but also opportunities for individual development led by specialists in the relevant fields, including mentoring, coaching or supervision.

## Reference

- Adamec, P., & Kryštof, D. (2021). *Zpráva o realizaci dílčího projektu Institucionálního plánu MENDELU 2021 - Rozvoj strategického řízení lidských zdrojů na MENDELU v oblasti kariérního rozvoje zaměstnanců*. Brno: Mendelova univerzita.
- Deaker, L., Stein, S. J. & Spiller, D. (2016). You can't teach me: exploring academic resistance to teaching development. *International Journal for Academic Development*, 21(4), 299-311, DOI: 10.1080/1360144X.2015.1129967
- Evropská komise. (2006). *Evropská charta pro výzkumné pracovníky. Kodex chování pro přijímání výzkumných pracovníků*. Luxembourg: Office for Official Publications of the European Communities.
- Hroník, F. (2007). *Rozvoj a vzdělávání pracovníků*. Praha: Grada.
- Linguist, S. (2018). Academic Development: A Space, But Is It an Identity?. In C. Bossu & N. Brown (Eds.). *Professional and Support Staff in Higher Education. University Development and Administration*. Singapore: Springer. DOI: 10.1007/978-981-10-6858-4\_18
- Matějů, P. (2009). *Bílá kniha terciárního vzdělávání*. Praha: Ministerstvo školství, mládeže a tělovýchovy České republiky.
- Matthews, K. E., Lodge, J. M. & Bosanquet, A. (2014). Early career academic perceptions, attitudes and professional development activities: questioning the teaching and research gap to further academic development. *International Journal for Academic Development*, 19(2), 112-124, DOI: 10.1080/1360144X.2012.724421
- Merkt, M. (2017). The importance of academic teaching competence for the career development of university teachers: A comment from higher education pedagogy. *GMS journal for Medical Education*. 34(4). DOI: <https://dx.doi.org/10.3205/zma001125>
- Němejč, K., & Smékalová, L. (2016). Evaluation of teaching competence of university teachers. *ICERI 2016 – Proceedings of 9th international conference of education, research and innovation*, 7919-7925. Seville, Spain. DOI: 10.21125/iceri.2016.0811
- Ragupathi, K. (2021). Desired characteristics of continuing professional development for holistic academic development. *International Journal for Academic Development*. DOI: 10.1080/1360144X.2021.2007484

- Rončević, N., Turk, M. & Vignjević, B. (2016). Research development competencies: junior academics' perspective. *ICERI 2016 - Proceedings of 9th annual International Conference of Education, Research and Innovation*. Seville, Spain. DOI: 10.21125/iceri.2016.0991
- Strategický záměr ministerstva pro oblast vysokých škol na období od roku 2021*. (2020). Praha: Ministerstvo školství, mládeže a tělovýchovy České republiky.
- Trabalíková, J. (2020). The power of case studies at the course of university teachers. In *Profesjonalizacja roli nauczyciela akademickiego* (s. 71-90). Krakow: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Trojanová, I., Trojan, V., & Kitzberger, J. (2012). *Kompetence řídicích pracovníků ve školství*. Wolters Kluwer Česká republika.
- Vašutová, J. (2002). *Strategie výuky ve vysokoškolském vzdělávání*. Praha: Univerzita Karlova v Praze.
- Verderame, M. F., Freedman, V. H., Kozlowski, L. M., & McCormack, W. T. (2021). *Supplementary Materials for Competency-Based Assessment for PhD Scientists*. Retrieved from: Elifesciences.org.
- Veteška, J., & Kursch, M. (2018). The research on the efficiency of the methods of talent management within organizations. *New Educational Review*, 52(2), 28-42. DOI: 10.15804/tner.2018.52.2.02
- Veteška, J., & Tureckiová, M. (2020). *Kompetence ve vzdělávání a strategie profesního rozvoje*. Praha: Česká andragogická společnost.
- Winberg, Ch. & Winberg, S. (2017). Pedagogical competence for engineering educators: Re-conceptualizing teaching portfolios. *Proceedings of IEEE Global Engineering Education Conference (EDUCON2017)*. Athens, Greece.
- Winter, J., Turner, R., Spowart, L., Muneer, R. & Kneale, P. (2017). Evaluating academic development in the higher education sector: academic developers' reflections on using a toolkit resource. *Higher Education Research & Development*, 36(7), 1503-1514, DOI: 10.1080/07294360.2017.1325351

#### Contact details:

Mgr. Petr Adamec, Ph.D., MBA  
Department of Social Sciences  
Institute of Lifelong Learning  
Mendel University in Brno  
Zemědělská 5  
613 00 Brno, CZECH REPUBLIC  
E-mail: petr.adamec@mendelu.cz

Mgr. David Kryštof, Ph.D., PCC  
Department of Social Sciences  
Institute of Lifelong Learning  
Mendel University in Brno  
Zemědělská 5  
613 00 Brno, CZECH REPUBLIC  
E-mail: david.krystof@mendelu.cz

---

# INNOVATIONS IN IN-SERVICE TRAINING OF UNIVERSITY TEACHERS IN DIGITAL COMPETENCIES

---

Viola Tamášová, Silvia Matúšová, Roman Tandlich

## Abstract:

Universities all around the world, including the Slovak Republic, were exposed during the pandemic to undergo digital transformation effecting teaching, learning, and research activities of university teachers. The in-service training of university teachers in digital competencies is a current and increasingly urgent task of the managements of universities. The increase of digital competencies in university teaching staff could promote the betterment of the quality of education and the overall quality of higher education institutions.

## Key words:

digital transformation, university, teachers, further education, digital competence

## 1 INTRODUCTION

The pandemic of the new coronavirus COVID-19 broke out at the end of 2019 and has led to widespread, complete closure of schools, universities, and colleges. According to UNESCO (2020) estimates, a total of nearly 1.6 billion worldwide students have been affected by the closures of educational institutions in 2020.

This accounted for 91,3 % of the world's total learning community, with a total of 193 countries providing full nationwide remote teaching (Kristóf, 2020). The education at universities was shifted to virtual environment. While the education in 2020 was gradually and partly switched to online education, in 2021 lectures, seminars and consultations took place in virtual conditions to larger extent. In some study programs (eg. medicine, pharmacy, engineering, etc.), the exercises were postponed to the period when strict anti-pandemic measures were released.



The digital transformation has affected the processes of teaching and learning and has put on university educators some new challenges associated with upskilling and the empowerment of digital skills and competence.

The aim of the paper is to present and analyse some aspects of the impact of the pandemic upon the necessity to upgrade and upskill university teachers with digital skills that can be beneficial in teaching, learning and research activities of university educators.

The specific aim is to point out that the teachers' digital competency (TDC) framework has been elaborated and could serve as a reference in the teachers' in-service training in digital competencies.

## 2 LESSONS LEARNT FROM ONLINE EDUCATION DURING THE PANDEMIC OF COVID-19

In pedagogical practice at all levels of education, contact teaching (direct contact of teachers with learners) has been replaced by teaching in a virtual environment. The most important change due to the corona pandemic since 2020 has been the attempt to minimise face-to-face contacts, switch to emergency remote education at very short notice, which presented a number of problems for all participants (Buda & Czékman, 2021). There was an accelerated migration from face-to-face to online learning (Cloete, 2021).

The use of information and communication technology (ICT) in education, including higher education, has transformed students' expectations and, at the same time, redefined the role of online educators. This is because online teaching and learning is significantly different from teaching and learning in a traditional environment, and educators need to rethink their role in the learning and teaching paradigm (Rajcsányi-Molnár & Bacsá-Bán, 2021).

The digital transformation of teaching and learning at universities requires the capacity building of teachers' professional capacities, interlinked to new skills and competences, especially the competence to work with digital technologies (Batanero et al., 2020).

Online education has brought a lot of changes into teaching process, preparation of teaching staff and educational results. Due to Di Pietro (2020), the inequalities in educational results of students could be ascribed either to the readiness of teachers for online education, and to the transition from offline to online teaching.

It can be assumed that with the launch of digital technologies, the competencies of teachers had changed, however the concept of teaching in teachers does not change as quickly as technologies, as pointed by Daučianskaitė & Žydžiūnaitė (2020).

As regards the assessment of online education, it was found out in a survey among university students (Matúšová, 2022) that the way of online teaching and learning was assessed positively, however a number of negative assessments were added.

The biggest disadvantages of online education denoted in a sample were: a) restricted communication between a teacher and students, b) the lack of classmates' support, c) little interaction among classmates, d) excessive social isolation and e) limited opportunity to cooperate with classmates.

Students expressed that they expect and require from teachers to have developed technical skills and the ability to work with a given technical platform, apt for online instruction. Regarding the pedagogical skill, students require from teachers the linkage and interconnectedness between explanation and exposition of educational content, supplemented with topical information. They expect from teachers the ability to apply standard pedagogical techniques and instruments, to use motivational incentives, continuously assess students' answers, etc. Respondents expect smooth mastery of teachers in online education. Pedagogical skills are required as a matter of course. Teachers are requested to master technical as well as digital skills. For this purpose, teachers should be specifically trained. Professionalism of educators is considered the most important aspect of online education, both teaching and learning. The role of a university teacher has changed under the dynamic development of society and the digital transformation of education.

In spite of long-term expertise and pedagogical skills, it is difficult to be creative in online education and hard to make the education interesting.

As the teaching staff are the key players of effective implementation of online education, they should be continuously professionalized, developed and trained.

Currently, teaching is perceived much more as a professional activity, so teachers at universities are required to professionalize teaching activities.

UNESCO (2020) has brought several guidelines which were recommended to be applied during the COVID pandemic in educational practice, namely:

- a) to prefer collaboration among teaching staff and cooperation in partnership schemes;
- b) to stimulate multisectoral cooperation (inter alia between education, health system, social and communal spheres);
- c) to facilitate peer learning (including the sharing of experience, information, challenges, suggestions and solutions);
- d) to strengthen the practice communities of teachers.

The survey at School Education Gateway (2020) attracted some 4200 teachers from Europe and some 650 participants from third countries, who indicated that online education could bring a number of positive phenomena, such as innovations (experimentations in instruction), flexibility, broad scale of teaching tools and accessibility (platforms, sources, open-access documents). They also indicated that online education could develop the autonomy, motivation, self-regulation and self-determination in students. Further, with regard to students, online education could adapt instruction to students, become an attractor, a useful facilitator of learning, improvement of relations among students, a tool which is easily and simply utilized. As little as 3,3 % of respondents have confirmed they had no experience with online education so far.

### 3 RESEARCH

Recently, the research in digital competence has been focused on different groups, mainly teacher and students. We will focus on results of several surveys

However, digital competence is a broader and more universal concept, as evidenced by the EU Council Recommendation (2018), which states that digital competence includes components such as information and data literacy, communication and collaboration, media literacy, digital content creation (including programming),

security (including digital well-being and cyber security), intellectual property issues, problem solving and critical thinking.

There is a hidden idea behind digital competence that it is an important aspect of contemporary life, including education. Digital competence can be learned and developed. Universities are therefore responsible for supporting the development of digital competence in their students as well as university teachers.

In students, digital competence is understood as the ability that equips an individual to live, learn and work in a digital society. Students attending universities are members of virtual generation, called net generation, digital natives or millennials, born into digital era (Ali, 2020).

Some researchers point out that students rarely use technology for advanced knowledge-related activities or problem-solving unless they have been required to do so by their course or tutor.

As teachers and educators face new challenges, they increasingly need broader and more sophisticated sets of digital competences. The ubiquitous digital tools and the role of teachers in helping students to become digitally competent require teachers to develop their own digital competencies.

At present, educators need to develop educational competencies and subject-matter knowledge, pedagogical skills AND digital competence in personalized online education. In conditions of pandemic, educators have to deliver courses efficiently, using innovative methods and technologies that are required for effective presentation, processing, skill development, and real-life applications.

Recently, the research in digital competence has been focused on different groups, mainly teacher and students. We will analyse results of some surveys in Slovakia, aimed at digital competence in both focus groups. The analysis will be supplemented with significant findings in theory of online education.

- a) *Survey on the satisfaction of teachers and students with online education at universities*

In Slovakia, one of the first survey was carried out in June 2020. The results of questionnaire survey provided results from 3490 respondents in 23 universities. The aim of the survey was to find out the satisfaction rate of teachers and students with online education from March till August 2020. The satisfaction rate of students with online education was increasing very slowly, with 13.52 % in March up to 27.62 % in June 2020 (Bilík, 2020).

The satisfaction rate was in relation with the awareness of students about online learning, documents, examinations and assignments. The survey revealed that digital technology and internet access were not available to all students and this hindered the transition to online learning in 8,26 % of respondents. Students identified some deficits in digital technology availability for teachers which complicated the online teaching. The application of online teaching in some universities showed big discrepancies in digital skills in teachers and deficits in digital support for teachers. Some universities were facing problems in securing internal systems of quality of education. Some students were seduced to unfair malpractices when participated in online testing and examination.

b) *Transition from full-time education to online education in primary and secondary school teachers*

The survey was organised in July 2020, the focus group consisted of 15645 teachers from primary and secondary schools in Slovakia (Ostertágová and Čokyna, 2020). The most significant results included the following findings:

- Some 7,5 % of the overall population of pupils in primary and secondary schools did not participate in online education;
- Some 18,5 % of pupils in primary and secondary schools were not educated via digital technologies and internet;
- Teachers of secondary schools mostly applied the combination of online and offline teaching;
- The offline teaching was assessed by respondents the least effective. The offline teaching was based on mail communication with assignments for pupils. In case of no internet availability, the distribution of paper hand-outs to pupils was secured by teachers and schools, and teachers made individual phone calls with pupils;

- Asynchronous approach was prevailing in online education. The explication of curricula and feedback from pupils were assessed the most demanding aspects of online education;
- The lack of digital technology equipment in households was detected in a significant group of pupils from disadvantageous environ (low-income families, minorities, Roma communities).

c) *Challenges for online education in 2020/2021*

The Centre for Educational Analyses in October 2020 pursued a survey covering the sample of selected primary and secondary schools in Slovakia. The findings (Ostertágová and Rehúš, 2021) confirmed that:

- In the school year 2019/2020 some 10 % of pupils from monitored schools did not attend to online education;
- As many as 75 % of teachers from monitored schools utilized the practice to provide for distribution of paper hand-outs to pupils and the collection of filled-in hand-outs;
- Almost 85 % of respondents expressed the attitude that during the pandemic pupils and students mastered less knowledge and skills compared to full-time education;
- As many as 78 % of respondents considered online teaching very demanding and physically and mentally exhausting;
- As for the grading, some 78 % of respondents specified that they applied verbal assessment solely and one third of them stated that they did not apply any assessment during the pandemic;
- Some 88 % of respondents were of opinion that when pupils and students get back to school, they would need support in socializing, team-building and adaptation to school environ, some 61 % thought that students would need special tutoring in several subjects.

The above surveys brought significant information concerning the learning of pupils and the teaching of teachers in online education under the pandemic. Firstly, the unpreparedness of schools, school managements, teachers, pupils and society at large for the transition to online teaching and learning. Secondly, the lack of digital technologies in schools and households, mainly in low-income families which

would hinder equal opportunities for learning and would aggravate the possibility to transit to online education for all learners.

Thirdly, the low technological, educational and logistical support by school principals and school managements to online education. Fourthly, the necessity to focus the in-service training of teachers to digital skills and competences. Last, but not least, the obligation of school managements to secure the internal quality of education under pandemic conditions and the task for the educational policy makers to develop relevant rules and recommendations applicable nationwide.

## 4 DISCUSSION

The above findings and analyses confirmed the necessity to look closely at digital competencies in teachers, to identify set of digital skills and competencies suitable for application in pandemic conditions and to develop in-service teacher training programs of re-skilling and upskilling of school head and teaching staff.

Some findings in the above areas have been confirmed and some recommendations were elaborated.

Janssen et al. (2013) identified twelve areas of teachers' digital competencies. It could be understood as a competency model, meaning a *collection of competencies* that together define successful performance in a particular work setting. Competency models are the foundation for important human resource functions such as recruitment and hiring, training and development, and performance management. The difference between a competence and a competency could be explained as follows: A competence is the ability to perform a job. A competency is the ability to use a set of relevant knowledge, skills, and abilities to successfully perform "critical work functions" or tasks in a defined work setting. A competency model is a framework for defining the skill and knowledge requirements of a job.

Janssen et. al. (2013) thus described and explained the teachers' digital competency (TDC) framework based on the competence rooted in digital literacy and developed into digital competence. The TDC framework is composed of 12 competencies, with each demonstrating the knowledge and understanding of a specific area.

Janssens et al. (2013) described the content of each area and presented the view that individual digital competencies of teachers must be interlinked and interwoven, thus providing a broad, logical framework of knowledge and understanding of a specific area.

1. Functional competency refers to the knowledge and understanding of terminology, use of digital technologies for basic purposes.
2. Integrative competency is combined with the knowledge and understanding of effective integration of digital technologies into everyday life
3. Specialised competency concerns the knowledge and understanding of optimising digital technology use for work and creative purposes.
4. Communication and collaboration associates with the knowledge and understanding of digitally-supported networking for collaborative knowledge development.
5. Information management competency refers to using digital technologies to access, organise, analyse and judge the relevance and accuracy of digital information.
6. Privacy and security competency is connected to measures to protect one's personal identity, data, and security.
7. Legal and ethical competency refers to the knowledge and understanding of socially appropriate behaviours in digital environments, including legal and ethical factors associated with the use of digital technologies and content.
8. Technology and society competency is associated with the knowledge and understanding of context and use of digital technologies, and the impacts of these on people and society.
9. Learning with and about technology competency concerns the knowledge and understanding of emerging digital technologies, and how they can be used to support learning across the lifespan.
10. Informed decision-making competency is linked with critical selection of digital technologies suited to needs and purpose.
11. Coherence/self-efficacy competency concerns the knowledge and understanding of using digital technologies to improve personal and professional performance.
12. Dispositional competency refers to the importance of maintaining an objective and balanced perspective on digital innovations, and being confident to explore and exploit their potential as opportunities arise.

The development of digital competences of teaching staff is currently an increasingly urgent priority. In higher education, the digital transformation requires to set up new demands, especially in terms of new skills that would empower teachers to use digital technologies in online teaching and students to participate in online learning.

The authors Pisoňová et al. (2021, p. 231) state that university educators should also develop a combination of digital skills and research skills, as research is a part of academic activities and “regardless of the education in academic disciplines, in which the university educators teach, the scientific results need to be observed, selected, analysed and communicated through technological tools.”

Bartošovič and Tamášová (2020) found out, teachers state that their professional development and further (in-service) education through ICT technologies can yield from several advantages of ICT, especially the opportunity to work at one’s own pace, to access to documents at any time, and the opportunity to contact, communicate and discuss new ideas and applications with other participants, even those outside the local area.

Competence to work with digital technologies means a certain and critical use of information and communication technologies at work, in leisure time and in communication.

A competence-based model of professional development can be applied in this context. The model is principally based on the analysis of educational needs. It also includes professional standards that apply to the professional efficiency of a teacher.

The training needs should be assessed due to the requirements of the teaching profession and from the aspect of maintenance, deepening and extension of competences in university teachers as well as the goals set by university management.

Educational needs can be hypothetically defined as a lack of knowledge or skills that are important for teaching profession and an individual teacher, preserving and promoting teacher’s mental, physical and social function. They can also be characterized as a gap between the actual performance and a predefined performance standard.

Thus, the development of competence-based models of further education and development of university teachers should clearly follow the identification and analysis of educational needs.

As Gavendová (2021, 49) states, learning represents behavioural mental changes that arise as a result of life experiences. These changes result from interaction with the environment. Learning in the in-service training should develop in university teachers their professional teaching competences, including the expertise in the subject matter, and extending to methodological-didactic, pedagogical-psychological, self-reflexive and reflexive competences. These can be considered the basis of teachers' professionalism.

As digital skills, digital literacy and digital competences applied by teachers in online teaching are interlinked to the knowledge of their substance, the attitude toward the use, as well as their skill to demonstrate them in action (behavioural aspect) should be strengthened.

Tamášová and Geršicová (2020) pointed out that the changing needs of society are also changing the needs of schools, and teachers are required to cope with new tasks, for which they were not prepared in initial teacher training. The authors state that the preconditions for the professional development of teachers lie in the setting of conditions by the university management. The role of the university management lies in the support of teaching, planning and implementation of students’ learning, and the utilization of cooperation and collegiality of learners. Positive results of professional development of teachers can be found in workplace learning and intergenerational learning, which represent opportunities for professional development of teachers.

In a broader sense, workplace learning consists of learning in the workplace and learning through the workplace. Workplace learning is characterised by spontaneous reactions within the social interactions of learners, e.g. both pedagogical and non-pedagogical faculty staff.

Workplace learning is on-the-job learning, most often implemented through specifically targeted (in-service) training, but also through education in the broadest sense. In addition, learning through the workplace is mediated on the basis of educational programs, trainings, courses and the like.



Specifically, workplace learning is a combination of formal education, non-formal education and informal learning. Experts also report that three-quarters of on-the-job learning is provided through non-formal education, in the form of self-education, mentoring or information transfer. Formal learning obtains a variety of certificates.

Intergenerational learning represents another way of professional development of teachers is. It is a specific type of learning that can be defined as learning processes that mainly involve members of different generations. It can be described as a set of activities which focuses on a certain benefit for each participating generation. The activities intermediate a mutual exchange of information between people of different generations, representing a type of two-way transmission. Intergenerational learning takes place in the school environment and could be conveyed in numerous ways.

The intergenerational learning is focused on such topics as teaching methods, approaches to education, modern technologies and the organisation of educational content (curriculum). All topics are conveyed from the older to the younger generation, or from senior lecturers to junior lecturers. And vice-versa, information and experience derived from teaching, usage of modern technologies and the organisation of curricula is transferred from the younger generation to the older generation. Some topics, as effective teaching methods can be conveyed two-ways. Intergenerational learning can also include issues of motivation and barriers in teacher training, affecting the success and job satisfaction of faculty staff.

The strongest form of collaboration is represented by joint work, strengthening relationships and responsibility between participating colleagues for one's own work and group work, leading to advanced readiness in common tasks and critical evaluation of joint work, revealing new potentials of teachers.

Team teaching can be described as teaching in which one class is taught by more than one teacher at a time. Team teaching has a beneficial effect on the professional development of teachers, because it promotes a mutual interaction between teachers who exchange and share their opinions and present their teaching methods.

The teaching staff are the key players of in the effective implementation of ICT integrated learning. Therefore, it is pivotal that they have the right attitude and perception about ICT integrated in teaching.

In this context it is suitable to remind the assessment of the World Bank which formulated and emphasized a number of challenges associated with online teaching and learning:

- a) Transitioning to online learning is a very difficult and highly complex undertaking for education systems, even in best circumstances.
- b) Moving to online learning raises profound equity concerns.
- c) Highly motivated learners are the most likely to take the most advantage of online education system.
- d) Organizing digital education content can be critical from the aspect to ensure that the learning opportunities correspond to broader educational objectives within an education system.
- e) Making content available on a wide variety of devices and mobile friendly is critical.
- f) Staff teaching online need to be supported.
- g) Providing a supplemental guidance and support on how to use and access remote and online learning content can be critical.
- h) Some academic subjects are easier to move online than others (World Bank, 2020).

The interconnection between digital skills and education was supported by an analytical study "56 Delta skills", carried out by McKinsey Global Institute (2021), focusing on 56 fundamental skills that can be identified and developed in individuals. DELTA is an acronym for a distinct element of talents, i.e. it is a clear, distinct and distinctive element in the intellectual equipment (talents) of an individual. Fundamental skills can be divided into 4 areas: (1) cognitive skills, (2) interpersonal skills, (3) self-management (and entrepreneurship), (4) digital skills. The level of acquisition and use (proficiency) of selected skills in the statistical analysis presented in the DELTA study correlates with education.

Digital literacy (with individual components) achieves the highest correlation with education. It is digital literacy that is acquired and developed in formal education, non-formal education and informal learning. The integration of digital literacy into higher education in individual study programs is therefore becoming a necessity for current higher education in Slovakia.



## 5 CONCLUSION

The pandemic of the new coronavirus COVID 19 has brought to light the need to respond in a new way to an unprecedented situation that has put new demands on learning and education. The new trends that the pandemic has triggered in the development of society can be described by the single term “digital transformation”. It represents a new trajectory of economic and social development, with digitalisation affecting almost all areas of life and work, including education and job training. Especially in the field of higher education, the digital transformation is setting new demands, especially in terms of preparing for new skills that allow university educators to use digital technologies in online education and students to participate in the learning process in the online environment.

New educational reality called on students and university educators to improve their competence to deal with digital technologies, develop their digital competences, and made an urgent call for university leaders to ensure relevant learning conditions in a virtual environment

The study of professional pedagogical and didactic literature reveals that pedagogical and andragogical dictionaries, lexicons and other sources will need to incorporate new perspectives on education that takes place in virtual conditions. We find that some terms and conditions are not included in the source materials, resp. even works published in the recent past are not entirely clear.

## References

- Ali, W. (2020). *Online and Remote Learning in Higher Education Institutes: A Necessity in Light of COVID-19 Pandemic*. Higher Education Studies. <https://doi.org/10.5539/hes.v10n3p19>.
- Bartošovič, M. & Tamášová, V. (2020). Vzdelávanie učiteľov pomocou online technológií. In Rajs ký, A. (Ed.) *Juvenilia Paedagogica*. Trnava: Pedagogická fakulta Trnavskej university.
- Batanero, J., Rueda, M., Cerero, J., & Martínez, I. (2020). Digital competences for teacher professional development. *European Journal Teacher Education*, 43, 1-19. <https://doi.org/10.1080/02619768.2020.1827389>
- Bilík, M. 2020. *Výsledky prieskumu – Dopad COVID-19 na študentov*. [online]. Slovenská akreditačná agentúra pre vysoké školstvo, 2020.
- Buda, A. & Czékman, B. (2021). Pandemic and Education. *Central European Journal of Educational Research*. <https://doi.org/10.37441/cejer/2021/3/3/10391>
- Cloete, M. et al. (2021). Migrating from Face-to-face Online learning During the COVID-19 Pandemic: The Experiences of Psychology Students at a Private Higher Education Institutions in Gauteng. *Central European Journal of Educational Research*. <https://doi.org/10.37441/cejer/2021/3/3/10003>
- The Council of the EU. (2018). *The Council Recommendation of 22 May 2018 on key competences for lifelong learning*. Official Journal. 2018 (2018 / C 189/01).
- Daučianskaitė, A. & Žydyūnaitė, V. (2020). Differences and similarities between coaching, instructional and educational leadership styles. *Acta Educationis Generalis*, 10(3), 87-100. <https://doi.org/10.2478/atd-2020-0022>
- Di Pietro et al. (2020). *The Likely Impact of COVID-19 on Education: Reflections Based on the Existing Literature and International Datasets*. Luxembourg : Publications Office of the European Union. doi:10.2760/126686
- European Commission - Joint Research Centre. (2017). *The European Framework of Digital Competences of Teachers*.
- Gavendová, N. (2021). *Kognitivně-behaviorální přístupy v praxi pedagoga*. Praha: Grada Publishing, a. s. 96 pp. ISBN 978-80- 271-2501-2.
- Iheanetu, Ch. U., Tamášová, V. & Tandlich, R. (2022). Speed, human reality, and the ribovirocell of human existence in the COVID19 and post-COVID19

space-time. (Manuscript: ESEP-2021-11-002). Date submitted: 2021-11-26. In *Ethics in Science and Environmental Politics*.

Janssen, J., Stoyanov, S., Ferrari, A., Punie, Y., Pannekeet, K. & Sloep, P. (2013). Experts' views on digital competence: Commonalities and differences. *Computers & Education*, 68, 473–481.

Kristóf, Z. (2020). International Trends of Remote Teaching Ordered in Light of the Coronavirus (COVID-19) and its Most Popular Video Conferencing Applications that Implement Communication. *Central European Journal of Educational Research*. <https://doi.org/10.37441/CEJER/2020/2/2/7917>

Matúšová, S. (2022). Digital Competencies in Online Education: Challenges for Now. pp. 52-74. In Antošová, G. (Ed.) *Innovative Strategic Planning and International Collaboration for the Mitigation of Global Crises*. IGI Global. <https://doi.org/10.4018/978-1-7998-8339-5.ch004>

McKinsey&Company. (2021). *Defining the skills citizens will need in the future world of work*. McKinsey Global Institute. <https://www.mckinsey.com/mgi>

Ostertágová, A. & Čokyna, J. 2020. *Hlavné zistenia z dotazníkového prieskumu v základných a stredných školách o priebehu dištančnej výučby v školskom roku 2019/2020*. Bratislava: Inštitút vzdelávacej politiky, 2020.

Ostertágová, A. & Rehúš, M. (2021). *Správa z reprezentatívneho prieskumu o priebehu a dopade dištančnej výučby v školskom roku 2020/2021*. Bratislava: Centrum vzdelávacích analýz, 2020.

Rajcsányi-Molnár, M. & Bacsa-Bán, A. (2021). From the Initial Steps to the Concept of Online Education. *Central European Journal of Educational Research*. <https://doi.org/10.37441/cejerr/2021/3/3/9612>.

Redecker, C. (2017). *European Framework of Digital competence of Educators: DigCompEdu*. Punie, Y (ed.). Luxembourg: Publications Office of the European Union. doi: 10.2760/159770, JRC 107466.

School Education Gateway Portal. (2020). Survey on online and distance learning – results. <https://www.schooleducationgateway.eu/en/pub/viewpoints/surveys/survey-on-online-teaching.htm>

Tamášová, V. & Geršicová, Z. (2021). Transverzálnosť profesijného a celoživotného vzdelávania v učiacej sa spoločnosti Európy. In Bakošová, Z. & Dončevová, S. (eds.) *Pedagogika a andragogika I. (vedy o výchove a vzdelávaní)*. Bratislava: Univerzita Komenského v Bratislave, p. 94 -101.

UNESCO (2020). *COVID-19 Educational Disruption and Response*. <http://en.unesco.org/covid19/educationresponse>

UNESCO (2011). *ICT competency standards for teachers* (version 2) Paris: UNESCO.

World Bank (2020). *Remote Learning and COVID-19. The use of educational technologies at scale across an education system as a result of massive school closings in response to the COVID-19 pandemic to enable distance education and online learning*.

#### Contact details:

Assoc. Prof. PhDr. Viola Tamášová, PhD., Assoc. Prof. Roman Tandlich, PhD.  
DTI University  
Department of School Pedagogy and Psychology  
Sládkovičova 533/20  
018 41 Dubnica nad Váhom, SLOVAKIA  
E-mail: [tamasova@dti.sk](mailto:tamasova@dti.sk), [roman.tandlich@gmail.com](mailto:roman.tandlich@gmail.com)

PhDr. Silvia Matúšová, CSc.  
Bratislava University of Management and Economics  
Department of Economics and Finance  
Furdekova 19  
85104 Bratislava, SLOVAKIA  
E-mail: [silvia.matusova@vsemvs.sk](mailto:silvia.matusova@vsemvs.sk)

---

# SUSTAINABLE DEVELOPMENT AS A PART OF THE PHILOSOPHY FOR CHILDREN COURSE IN UNDERGRADUATE TEACHERS TRAINING

---

Simona Borisová, Gábor Pintes

## Abstract:

The paper focuses on presenting the educational programme Philosophy for Children as one of the subjects included in the university training for the teaching profession. This programme is designed primarily to develop the independent thinking of participants in philosophical discussions. Through reading literary stories and discussions, participants work together to address many life and global issues.

## Key words:

undergraduate teacher training, Philosophy for Children, P4C, philosophical literary story, discussion.

## 1 INTRODUCTION

Bringing philosophy in connection with literature into educational institutions in the 21st century in a non-authoritative way may seem to many people to be an impracticable and perhaps useless act. *Philosophy for Children* (we use abbreviation P4C) originated as a set of methods for the development of thinking but during its existence (since the 60s of the last century) was adapted for several purposes, especially in the development of personality as such. Philosophy is traditionally reserved for a small group of adults and is often based on the assumption that children are not interested in Abstract: concepts related to the basic issues of this discipline (Hiner, 2013). We consider the idea that children are not interested in philosophical topics to be wrong for several reasons. Matthew Lipman, Ann Margaret Sharp, and Frederick Oscanyan (1980) believe that adults too often associate children's curiosity with the desire to obtain some information, rather than because of the need to

solve philosophical problems (for example good and evil, justice, nature, truth, friendship, love) stems from child's nature. The fact is, however, that philosophical problems are not limited to the interests of adults and do not have to be formulated in a complicated way. One of the positive areas of philosophizing is that people of almost all ages can participate with joy.

The program was created thanks to the American philosopher and professor Matthew Lipman in response to problems in the school system and deficiencies in the thinking and speech of students at the University of Montclair. P4C has spread as a program to promote independent thinking almost worldwide (Gregory, 2002, Daniel – Auriac, 2011). The author formed the program based on philosophical concepts (influence of pragmatism, Socratic dialogue, Aristotelian logic, philosophical language according to Ludwig Wittgenstein) and psychological concepts (influence of Piaget and Vygotsky). He theoretically justified these inspirations in creating the program in many books and articles.

At many universities around the world, the program is taught as a separate subject or it is a part of other subjects. The most active centres primarily focused on this programme in Europe are in Germany, Italy, Spain, Portugal, France, Ireland and England (Gorard, 2019). Grigg and Lewis (2019) state that many schools hold P4C meetings in regular blocks, most often once a week. The duration may vary depending on the time required for pupils and students to maintain attention in the discussion process, which is crucial for the application of the subject program. An example of the application of P4C can be the implementation of this program in nature, as a part of the *Forest School Programme* in several English cities.

We consider the application of the P4C as a university school subject in preparation for the profession of a teacher to be beneficial for two reasons. The first is to provide a space for cultivated philosophical discussion in higher education, on topics that students do not usually deal with in the subject area. The second reason is the preparation for the application of the whole programme or its elements in their pedagogical work. Future teachers, students who do not have a deeper experience with philosophy, are practically learning to incorporate the methods of P4C (to work with the literary story and complementary activities). This paper aims to examine the philosophical literary stories that students read and then discuss as part of their university training. Participants also have space to deal with issues related to nature and the environment – protection of nature, animals, water-saving, waste sorting

or not producing excessive waste and so on. Lipman, Sharp and Oscanyan (1980) present the view that it is difficult to develop an ecological love for nature without a certain philosophical understanding of what nature is and what it provides to a man. One of the possibilities of forming a relationship with nature can be a suitably chosen literary text.

## 2 METHODS

Philosophical literary stories are a specific type of text containing philosophical elements and are generally characterized by simplicity in terms of theme, content, and language. Readers can relatively easily identify themselves with the characters, and for this reason, this type of text has a significant educational function (Costello, 2012). We have not found any relevant research aimed at the elements of creative, critical, or caring thinking in philosophical literary stories. We consider the examination of philosophical literary stories as a partial area of P4C to be beneficial due to the deepening of the research side of this programme and the improvement of its implementation in educational practice. Since we are not able to precisely describe what elements of critical, creative and caring thinking appear in the stories, we will apply the procedures of qualitative methodology. From the above, we ask the research question: What categories of critical, creative and caring thinking can be reflected in philosophical literary stories? From the research questions, we derive the research goal: To analyse and reflect the categories of critical, creative and caring thinking in the philosophical literary stories.

The research sample is represented by a group of stories that are used in the practical part of the P4C. Interpretation of the literary text represents the main research method through which we deal with categories of critical, creative and caring thinking. As claimed by Kosturkova (2019) critical thinking thus appears to be a complex activity built from other skills that are easier. We can also transform this statement into the other two dimensions of thinking mentioned. Above stated categories potentially observable in a philosophical literary story are subject to the interpretation of a literary text through which we may reveal deeper meanings and text functions when focusing on the given topic. Interpretation represents a reduction of an original text (in spoken or written form) to key statements and at the same time creative communication of meanings (Corbin, Strauss, 2015).

The following chapter includes characteristics and interpretations aimed at middle and older school age. Due to the specified scope of this paper, we present only a part of the research. We focus on depicting elements of critical, creative and caring thinking in one specific literary story, which is addressed by university students. Later, students can use this story (and many other stories) in their pedagogical work.

### 3 RESULTS

The book we chose for the interpretation is called *Lisa (Can We Both Love Animals and Eat Them?)*. It is aimed at young readers of 12-14 years of age. Characters of the book are curious, interested in thinking in formal logical formulas, looking for and enjoying explanations, sensitive to the feelings of others with creative thinking. These characters most often represent models of adequate behaviour (Lipman, Sharp, Oscanyan, 1980). This story is focused on moral values reflection. Some topics deal with the children's rights, work and discrimination according to sex and rights of animals. The central topic of the concerned chapter handles the relation of people to animals. Several questions in the story concern the rights: "Do animals have rights?" "Do children have rights?" "Do you believe that animals have a right to live?"

These questions result from curiosity which may be understood as an expression of critical thinking (non-cognitive factors). A clearer category of critical thinking – logic – is represented in the title itself "Can We Both Love Animals and Eat Them?" it deals with an issue that may stimulate thinking over ethical and pragmatic consumption of animal food. Activity to handle the problem may be stimulated by further questions included in the text: "How come everything looks so simple, and when we start talking about it, all of a sudden everything is so complicated?" or "How can I be against killing animals, when I love roast chicken and roast beef so much? Shouldn't our thoughts agree with what we do? Shouldn't our actions agree with what we believe?"

One of the characters, Harry, tries to solve the problem with an idea – a category of creative thinking: "Wouldn't it be better if people stopped eating meat?" His father warns him not to forget to consider how the world would change if they all stopped eating meat. As people have to eat something, the consumption of cereals and vegetables would increase, and some may have difficulty replenishing the necessary nutrients. Harry's father tells him that if he doesn't consider everything, he won't be

able to see the whole problem. So there is a certain criterion that we can consider as a category of critical thinking – criteria. Another category of critical thinking is this judgment: Lisa's looking for reasons why she should or should not eat meat cover an assessment of several consequences resulting from the acts. Lisa finally concludes that she should not eat meat: "If I cared about animals, I couldn't bear to eat them."

There are also categories of creative thinking in the text – *originality* (We can consider Michal's statement as a partially original idea: "Animals have the right to kill and eat us if they manage to catch us, and we have the right to kill and eat them - when we catch them."), *experimentation* (We could include here Harry's idea "Wouldn't it be better if people stopped eating meat?" He then suggests a possible solution: "Just grow more grain and vegetables." Subsequently, however, this proposal rejects the procedure because it realizes that applying this solution is not so simple in practice.), *amazement* (Statement of the character in the sentence: "Animals have the right to kill and eat us when they manage to catch us, and we have the right to kill and eat them - when we catch them."), *applicability* (A possible solution to the problem of killing animals for human consumption is Harry's idea that people would stop eating meat and grow more grain and vegetables instead. However, this idea proved to be ineffective in the story.)

We conclude that the categories of critical and creative thinking observable in this story are similar and there is a thin line between them. In the case of the third dimension of thinking, we find in this story several categories of caring thinking. First of all, there is *an evaluation of values*. Through this story, readers learn to value human and animal rights. Based on the story, they may realize that some issues can improve, such as the relationship with animals, which we know most about when Lisa intervened against Mr Mares beating his dog: "Her breath held. Suddenly she jumped up and tried to catch the rod. "Stop it!" She shouted. Surprised, Mr Mares dropped the rod and turned to Lisa: "What are you doing ?!" Another category is *activity*:

Due to interest in the problem, Lisa decides not to eat meat, which we consider to be a manifestation of the activity. However, the chapter's conclusion suggests that this solution was probably not appropriate: "Lisa didn't want to have dinner that night. The wonderful smell tormented her, but at the same time, it made her feel satisfied. But somehow it didn't help. She rolled over on the bed, but at the same time, she was proud that she was able to cut off her meat ... But the night she fell asleep, she went into the kitchen and ate everything she could from the fridge."

## 4 ANALYSIS

Although we consider teachers, parents, grandparents, classmates to be the most influential models of good thinking, we emphasize the power of literary characters in literature. The analysis of philosophical literary stories shows that elements of critical, creative and caring thinking are present in the given stories. Using the method of interpretation of the artistic text, we identified some categories of given dimensions of thinking. We answer the research question that the categories of critical thinking in philosophical literary stories are mainly argumentation, reasoning, evaluation, logical thinking, inference, self-correction, criteria, and norms. The research shows that we identify creative thinking in philosophical literary stories in the categories of originality, imagination, experimentation, usability, and imaginativeness.

The characters use original solutions to problems, they can apply the solved problem to a new situation, ask questions and their thought processes are often surprising. In philosophical literary stories, the characters show their care in the sense that they care and engage in their inquiry. The results are important, meaningful and significant for the main characters. There is a strong interaction between the dimensions of critical, creative and caring thinking, and it is not possible to set absolute boundaries between them.

The real discussion is not about distinguishing them, but through our research, we demonstrate their occurrence and at the same time their connection. We also think of the broader context of P4C, because literary stories are part of this programme for later discussion and complementary activities aimed not only at developing the level of thinking but the advancement of the personality in other areas of its life.

## 5 DISCUSSION

How children, pupils, and students process information responsibly and critically, how they know how to behave creatively in difficult situations, their attitude towards helping and caring for others is primarily in the role of teachers and parents. There are many methods concerning the development of critical, creative and caring

thinking, and one of them may be P4C, a significant part of which is a philosophical literary story.

This interpretation of the literary story has provided little insight into this issue, but we believe that the program or parts of it can be inspiring in raising awareness of P4C methods. Neither the P4C nor the philosophical literary stories formulated for this program tell children what to think: it is up to the children themselves. However, what this program does is provide the intellectual, social, and emotional tools they need to make their thinking good (Sharp, 2018).



## References

- Cam, P. (2014). Commentary on Ann Margaret Sharp's 'The other dimension of caring thinking': *Journal of Philosophy in Schools*, Vol. 1, No. 1), pp. 15-21.
- Corbin, J. & Strauss, A. (2015). *Basics of Qualitative Research*. Fourth Edition. London: SAGE Publications, Inc. 431 p.
- Costello, P. R. (2012). *Philosophy in Children's Literature*. United Kingdom: Lexington Books. 325 s.
- Daniel, M. F. & Auriac, E. (2011). Philosophy, Critical Thinking and P4C. In *Educational Philosophy and Theory*, Vol. 43, No. 5, pp. 415-435.
- Gorard, S. et. al. (2019). Can programmes like P4C help schools to look beyond academic attainment? In *Educational Review*, Vol. 71, No. 2, pp. 146-165.
- Gregory, M. R. (2002). Constructivism, standards, and the classroom community of inquiry. In *Educational Theory*, Vol. 52, No. 4, 397-408.
- Grigg, R. & Lewis, H. (2019). *Teaching Creative and Critical Thinking in Schools*. London: SAGE Publications, 264 p.
- Hiner, A. (2013). Critical Thinking in the Literature Classroom. In *Inquiry: Critical Thinking Across the Disciplines*, Vol. 28, No. 1, pp. 26-35.
- Kosturková, M. (2019). Teaching Slovak Language and Literature in the 1st Grade of Grammar Schools: the Verification of the Development of Critical Thinking of Pupils. In *Journal of Language and Cultural Education*. Vol. 7, No. 2, pp. 173-187.
- Lipman, M. (1983). *Lisa*. 2nd Edition. Montclair: IAPC, 102 p.
- Lipman, M. (2003). *Thinking in Education*. United Kingdom: Cambridge University Press, Second Edition.
- Lipman, M. et. al. (1980). *Philosophy in the Classroom. Second Edition*. Philadelphia: Temple University Press. 259 p.
- Lipman, M. & Sharp, A. M. (1985). *Ethical Inquiry: Instructional Manual to Accompany Lisa*. Montclair: IAPC, 129 p.
- Nussbaum, M. C. (1992). *Love's Knowledge: Essays on Philosophy and Literature*. New York: Oxford University Press, 428 p.

Sharp, A. (2004). The Other Dimension of Caring Thinking. In *Critical & Creative Thinking: The Australasian Journal of Philosophy for Children*, Vol. 12, No. 1, pp. 9-14.

Wartenberg, T. E. (2014). *Big Ideas for Little Kids. Teaching Philosophy through Children's Literature*. United Kingdom: Plymouth. 2014. 172 s.

## Acknowledgment

This study was supported by the Slovak Research and Development agency under the contract No. APVV-18-0484 as a part of the research Forest Pedagogy and Education to Sustainable Development in pre-primary and primary education.

## Contact details:

doc. PaedDr. Gábor Pintes, PhD.  
Katedra pedagogiky  
Pedagogická fakulta  
Univerzita Konštantína Filozofa v Nitre  
Dražovská cesta 4, 949 01 Nitra, SLOVAKIA  
E-mail: sborisova@ukf.sk

doc. PaedDr. Gábor Pintes, PhD.  
Katedra pedagogiky  
Pedagogická fakulta  
Univerzita Konštantína Filozofa v Nitre  
Dražovská cesta 4, 949 01 Nitra, SLOVAKIA  
E-mail: gpintes@ukf.sk

---

# ACADEMIC STRESS IN ADULT HIGHER EDUCATION

---

Jana Martincová, Iva Staňková, Michaela Bílá

## Abstract:

This paper presents a research investigation focusing on academic stress in the university environment from the perspective of students. It was found that students experience academic stress very frequently while they have control over it. On the other hand, students do not consider themselves resilient to academic stress and admit that the university does not eliminate the factors that cause stress. At the same time, students require support from the university in minimizing academic stress.

## Key words:

academic stress, intensity, academic failure, success, university environment, adult education

## 1 INTRODUCTION

Stress can be described as a condition caused by the interaction between the individual and the environment. From an academic perspective, it is a disorder instigated by stressors in the school environment (Basith et al., 2021). Worldwide research points to a significant increase in academic stress and student burnout (Aina & Wijayati, 2019; Basith et al., 2021; Fariborz et al., 2019). Although some amount of stress can act as a stimulant to promote learning, excessive and prolonged exposure is considered undesirable. In this case, not only disruption and slowing down of the learning process can be encountered (Magnavita & Chiorri, 2018), but also several negative physical and psychological effects. These include loss of appetite, depression, anxiety, headaches, and sleep disorders. The consequence can be poor academic performance or failure to complete studies (Leslie et al., 2021).

College students find studying to be a period of frequently experienced anxiety and tension. Exposure to stress causes pressure that students must cope with in

order to succeed in their personal and academic lives (Argudo, 2021). Education at the university level is quite different from previous levels. Young students take on the role of adults and are fully responsible for their actions, preparation, and activity. They face a challenge. They are expected to carry out their own project or research and successfully defend their final thesis to be admitted to the final exams (Chacón-Cuberos et al., 2019). Studying at a university with a multitude of requirements is perceived by students as a very demanding and stressful process (Aina & Wijayati, 2019; Leslie et al., 2021). These include exams, the amount and complexity of course material that the students must understand (Fariborz et al., 2019), the amount of homework, or the adjustment to the academic environment. The time limits imposed on students, in addition to their other roles and responsibilities associated with adult life, can also be considered a stressor (Leslie et al., 2021).

For university students, external pressure and their own expectations are common sources of stress (Chinaveh et al., 2010). Reducing the balance between family life and the demands placed by educational systems appears to be a very critical issue (Elias et al., 2011). Students must divide their time between classes, studying, passing exams, extracurricular activities, and social life. An effective work-life balance acts as a protective factor against the development of academic stress (Picton, 2021). Prolonged exposure to stressors contributes to a disturbed balance state that manifests itself in various symptoms (Valdivieso-León et al., 2020) and negatively affects students' health, personal life, family, and partner relationships (Hamjah et al., 2015). As a consequence, their health may deteriorate (Pozos-Radillo et al., 2014), academic performance may decrease, and psychological distress may increase (Elias et al., 2011). Students' commitment to school, their level of participation in academic matters, and their overall enthusiasm for continuing their education may also be affected (Fariborz et al., 2019).

Academic stress has been identified as a significant predictor of mental well-being (Bergmann et al., 2019) and is often associated with immunological reactions (Magnavita & Chiorri, 2018). Students' emotional health is influenced by several factors. Therefore, it is important for higher education institutions to monitor indicators in the area of student assessment and focus on student satisfaction and mental health (Silva & Figueiredo-Braga, 2019). Prolonged exposure to stressors can disrupt the learning process and slow down the development of skills. The goal should be to understand the relationship between psychological pressure and students' ability to cope (Magnavita & Chiorri, 2018). Thus, it is imperative that

educational institutions create optimal learning environments and identify the perceived sources of academic stress students face so that they can be mitigated or eliminated (Leslie et al., 2021).

Educational institutions should strive to create an optimal learning environment. To reduce the negative effects of academic stress, it is necessary to identify perceived sources of stress early and develop an appropriate strategy (Leslie et al., 2021). A thorough analysis of academic stress is key to understanding varying student behaviour (Fariborz et al., 2019). It should lead to the elimination of long-term health complications (Pozos-Radillo et al., 2014). To prevent the severe symptoms that stress can cause, every university should have effective programmes in place (Chinaveh et al., 2010).

When a school implements supportive interactions with their students, student stress can be managed much more effectively (Anitei et al., 2015). It is essential to implement effective programmes that specialize in stress management (Chinaveh et al., 2010). The ideal programme involves planning, training, and problem identification. This can eliminate problems caused by long-term exposure to stressors (MoghimiIslam et al., 2013). Self-care strategies using stress management techniques could become part of the curriculum. Knowing how to manage and control stress is a valuable skill for life on- and off-campus. An appropriate system should help students eliminate the development of potentially harmful lifestyle habits (Chinaveh et al., 2010).

## 2 METHODS

The research investigation is primarily concerned with determining whether students at universities experience academic stress. Other variables such as sources of academic stress and its intensity are also examined. We also ascertain the assessment of students' resilience to academic stress and their ability to control academic stress. Furthermore, we test the assumptions of whether and how academic stress affects their performance.

In the research design, we propose the following fundamental questions: *How do students experience academic stress in college? What is the intensity of experiencing*

*academic stress in college? What are the sources of academic stress? How do students rate their resilience to academic stress? To what extent can students control perceived academic stress?*

The relationship between the variables under evaluation and some identifying information about the respondents, mostly related to the form of study, will also be examined.

### Research tool and data analysis

The research tool consisted of 25 questions focusing on academic stress research and seven identification questions (gender, the field of study, mode of study, etc.). Cronbach's alpha coefficient = 0.71 was calculated to assess the reliability of the research instrument. This is a satisfactory result. The data collected by this research tool come from a normal distribution. We conclude this fact based on the evaluation of P-P Plots and normality tests of the data. For the given reason, we further use parametric statistics. The data take nominal, ordinal, and metric values. We apply the contingency and correlation coefficients for nominal signs (Goodman-Kruskal lambda and Goodman-Kruskal tau). For the metric data, we use the Student's t-test to verify the difference between the mean scores of the two groups (full-time and part-time mode of study). See specific data analyses for more details.

### Research set

The primary research population consisted of students from the selected university. This university has 9000 students, of which 10% are international students. Since the questionnaire was not designed in English, we reduced the core sample just by international students. Thus, the total base set consisted of 8100 students. The selection of the research population was voluntary. Thus, it was up to the students whether they opted to participate in the research survey. Due to the pandemic situation, the questionnaire was administered online. The selected set consisted of 985 students, of which 252 were males, and 733 were females. The most common type of study was a bachelor's degree programme, in which 848 respondents studied. Furthermore, 136 respondents studied in a master's programme. Only one respondent was identified from among the doctoral students.

## 3 RESULTS

The survey did not ask whether students were currently experiencing academic stress. Academic stress is a situational factor. Therefore, we were interested in situations and factors that cause academic stress. At the same time, we also investigated the students' views on academic stress at university.

Based on the research investigation, an important area was to discover the sources behind the occurrence and development of academic stress among university students. In order to further work with the effects of academic stress, it is necessary to uncover the sources and set appropriate steps to reduce them or eliminate them entirely. The most frequent response was the students' claim that the university does not create conditions in which stress does not occur or occurs in isolated cases. However, this is a surprising finding that is explained by responses claiming the inappropriate organization of the curriculum and the assignment of challenging tasks by college teachers. Therefore, it is logical that this is the primary factor that places students in states of stress. We can include in the factor an overload of assignments, an inappropriate form of studying, or an inappropriately designed timetable.

Nevertheless, we hardly ever encounter conflicts between students or their teachers. It is possible that students do not provide enough feedback to teachers which could lead to a reduction of assignments and tasks, hence the requirement for teachers to discuss stress and similar areas with students. Apparently, students are afraid to go to teachers themselves and tell them about their demands for change or reduction in the demands placed on them. This finding ultimately confirms the dissatisfaction of the learners with the school environment. Therefore, there is an evident interest of students in better communication with teachers, which should lead to the elimination of discovered problems, working with students in stress management strategies, and, last but not least, the possibility of setting more appropriate approaches.

**Table 1: An analysis of students' views on academic stress at university**

Variable	Descriptive statistics					
	Mean	Mode	Frequency of Mode	Lower Quartile	Upper Quartile	Std. Dev.
My university creates an environment in which I feel minimal stress.	3,1	4	282	2	4	1,28
Teachers should work with us more (talk about stress, teach us stress management strategies) to reduce academic stress.	2,2	2	380	1	3	1,18
At school, I often have conflicts with classmates that are a source of my stress.	4,6	5	348	4	6	1,18
At school, I often have conflicts with teachers that are a source of my stress.	4,6	4	289	4	6	1,19
My stress at school tends to be caused mainly by the teacher's behavior.	3,6	4	272	2	5	1,38
My stress at school stems from the organisation of the curriculum (timetable, inconvenient forms of study).	3,1	2	287	2	4	1,34
My stress in college tends to be due to an intense barrage of assignments.	2,5	2	381	2	3	1,28

\*1 = fully agree, 2 = agree, 3 = I don't know, 4= disagree, 5 = totally disagree, 6 = I haven't encountered this

Source: own processing

### Intensity, resistance, control, performance

Academic stress affects university students on a weekly basis, as more than half of the respondents agreed. This is also evident from the results of research by various authors, who report that the effects of stress are becoming both more frequent and more intense. However, it cannot be assumed that academic stress is a motivation for students to perform better. Respondents reported that stress does not stimulate them to submit better student performance. This is very much in line with the following statement that students do not feel resilient to stress, which may also be due to their inability to perceive this stress as eustress that should encourage them to submit better performances. Thus, it can be assumed that students cannot handle the effects of academic stress. It is also for this reason that there is a statement from students who were interested in talking more about this topic with university teachers.

Interestingly, we can find that even though high psychological demands are placed on students, as often repeated stressful situations are not at all suitable for the health and well-being of the individual, the students are able to work with stressors in some way. Even if they do not feel resilient to stress, they have stressful situations under control to some extent. Depending on the link between intensity, resilience, control, and performance, we may find that academic stress is almost a daily routine

for university students, in which case it leads to undesirable behaviours and the development of health problems.

**Table 2: Assessing levels of academic stress intensity, control, resilience, and performance**

Variable	Descriptive statistics					
	Mean	Mode	Frequency of Mode	Lower Quartile	Upper Quartile	Std. Dev.
I think I'm resilient to stress.	3,84	5	328	3	5	1,34
I feel in control of my stress.	3,35	2	255	2	4	1,28
I feel stressed at school every week.	2,68	2	319	2	4	1,40
Stress prompts me to perform better in most cases.	3,56	4	234	2	5	1,34

\*1 = fully agree, 2 = agree, 3 = I don't know, 4= disagree, 5 = totally disagree, 6 = I haven't encountered this

Source: own processing

### Relational data analysis

The data analysis addressed the following questions: Is there a relationship between the variables of interest (intensity, resilience, performance, control, academic failure) and field of study? Is there a relationship between the observed variables (intensity, resilience, performance, control, academic failure) and the mode of study?

We computed the Goodmann-Kurskal lambda (0.00) and Goodman-Kruskal tau (0.004) for nominal data to examine the relationship between the field of study and respondents' experience of academic failure due to academic stress. We use an asymmetric lambda coefficient because of the possibility of distinguishing between the dependent (experience of academic failure) and independent variable (field of study). Both measured values (lambda and tau) show no association between the field of study and the experience of academic failure caused by academic stress.

Even in the other measured assumptions, i.e., the field of study and control, performance, intensity, no association can be observed between them. Also, there was no association between the programme of study and academic stress control, performance, and experienced intensity of academic stress. All the measured lambda and tau indices were less than 0.07.

The independent-samples t-test was used to calculate the association between the mode of study (full-time and part-time) and the intensity of academic stress.

Levene's F-test for the equality of variance was met ( $F=.876$ ;  $\text{Sig}=.350$ ). For the given reason, we used Equal variances assumed. The result shows a statistically significant difference between the mode of study and the intensity of perceived stress ( $\text{Sig. 2-tailed}=0.001$ ). Thus, we can conclude that the difference found in the perceived intensity of academic stress between full-time and part-time students did not arise by chance and may be the result of some systematic action.

The student's t-test was also chosen for the other variables studied to test the difference in mean values between full-time and part-time students. Thus, we looked at the difference between increased student performance due to academic stress, perceived control, the experience of academic failure, and resilience to academic stress. We used Equal variances assumed interpretation for all variables studied except for the perceived control over academic stress. We observed a statistically significant difference between perceived resilience ( $\text{sig}.0.02$ ) and perceived control over academic stress ( $\text{sig}.<0.001$ ). No statistically significant difference was found for the other variables, and the null hypothesis was accepted.

**Table 3: Student's t-test analysis of the difference between the mode of study and the observed variables**

Variable	Levene's Test for Equality of Variances		t-test for Equality of Means	Sig. /2-tailed/	Mean Difference
	F	Sig.			
Intensity of academic stress	.876	.350	-3.477	<.001	.400
Improving performance through academic stress	.407	.523	1.625	.104	.179
Perceived control over academic stress	6.689	.010	3.907	<.001	.410
Academic failure caused by academic stress	.003	.958	-.910	.363	-.129
Perceived resilience to academic stress	.027	.869	2.775	.006	.306

*Source: own processing*

However, it is clear from the table that the observed differences are very low, almost zero. Therefore, a more extensive research investigation would be advisable to verify the differences between the observed variables.

## 4 DISCUSSION

An integral part of the investigation was to categorize the sources that influence the impact of academic stress on students. As noted in Mulyadi et al. (2016), the sources of academic stress are varied and can include testing, the amount of material that needs to be learned, and the extensive number of assignments. This can also be confirmed based on the research investigation, as one of the most common sources of stress for students is being overwhelmed by the tasks and responsibilities placed on them. This is also related to inappropriate scheduling, which makes it difficult for students to combine academic and personal life in a balanced way. This is supported by Shin & Jung (2013), who state that this balance is indeed a critical issue. Suggestions to address this situation include asking students about their scheduling before making a final choice and allowing them to communicate more with teachers, whether through designated office hours, regular meetings, or the ability to anonymously communicate problems that arise in teaching or study organization.

Based on the data collected, we further find two significant areas that are very closely related. Even though students exposed to academic stress have not terminated their studies at another university, we see from the statements that most of them have considered doing so several times. Thus, we can assume that studying is so important to students that they want to continue despite being in unpleasant situations which they try to manage adequately. Given the apparent interest of learners, every school should develop an appropriate system for its students to deal with academic stress so that they are relieved in this area. A course on academic stress management, special counselling, implementation of tension-relieving techniques, or communication on a friendly level with teachers seems to be the solution. Respondents believe that they would be able to influence most stress issues themselves but are probably unsure of the appropriate steps and strategies, which is what the university should be able to help them with. Therefore, setting up more appropriate and intensive cooperation between the institution and the learners, either in the framework of the mentioned professional courses dealing with academic stress or by setting up a counselling centre, seems to be an essential recommendation.

The research has confirmed the frequent and intense impact of stressful situations on university students, as reported in Anitei et al. (2015), Elias et al. (2011), and many other prominent authors. Based on the analysis, we found that students develop



academic stress due to excessive imposition of study duties and inappropriate curriculum and study schedule organization. Basith et al. (2021) state that stress is often caused by the interaction between the individual and the environment, which in our case is the student and the school organization. Therefore, the recommended solution is to deepen the learners' relationship with the teachers, who should be regularly informed about what is a burden for the students, what duties they have to fulfil, and whether the tasks presented to them are imposed well in advance. Therefore, the inability to combine work and school and the subsequent drift from one institution to another can be a frequent source. Several significant factors that make it difficult for students to study can be traced through regular reporting. These results could be further elaborated to find optimal solutions.

Respondents largely agreed on the importance of mutual communication, which confirms the above recommendations for eliminating academic stress. It is evident that students are interested in collaborating with teachers as they realize that this could eliminate the inconveniences that make it difficult for them to progress in their studies. It was interesting to compare the results where students were interested in setting up a more active communication with their teachers; on the contrary, they did not show much interest in attending a course where they would learn coping methods with stressful situations. Based on a careful analysis of the data, it can be assumed that the primary reason is the lack of time that students have. It was also found that students do not consider themselves resilient to stress.

It would be pertinent to elaborate this statement further and provide the students with opportunities in communication with teachers, counselling, or other strategies through which they would learn to recognize themselves in stressful situations and learn to deal with such situations. Since stressful situations are an almost daily occurrence for students, setting up appropriate stress management strategies is relevant.

Academic stress occurring frequently and intensively can cause serious health problems, so it is particularly important to address this area. To eliminate the factors that predict stressful situations to the greatest extent possible, it is recommended to work with students on a regular basis to assess current events in the school environment.

## 5 CONCLUSION

This paper presents a research investigation that focuses on academic stress. We found that students experience academic stress at university very often. It is caused mainly by the excessive number of tasks and the organization of studies, which is impossible to combine with other activities. Sudden changes in a person's life can significantly affect their lifestyle and physical or mental health (Elias et al., 2011). Stress can be considered a reaction of the organism, when different defence mechanisms enter a person's life to face a situation that the person perceives as threatening or requiring increased attention to the condition (Pozos-Radillo et al., 2014; Suárez-Riverio et al., 2020).

We consider it necessary to strengthen the university-academic-student triad within the academic environment. The disruption of relationships in this triangle tends to be a typical and unsurprising outcome of much research. Creating a supportive and non-threatening learning environment should be a primary goal of the education system. We propose conducting another research investigation that would address the pedagogical aspects of academic stress and analyse the correlation between academic stress levels and specific concepts of some pedagogical theories (e.g., Bloom's Taxonomy of Educational Objectives). The development of research on the higher education environment in the Czech Republic is of utmost importance to improve the quality of higher education studies and to minimize negative influences.

## References

- Aina, Q., & Hermilia Wijayati, P. (2019). Coping the Academic Stress: The Way the Students Dealing with Stress. *KnE Social Sciences*, 3(10), 212-223. <https://doi.org/10.18502/kss.v3i10.3903>
- Aniței, M., Cojocaru, F., Burtaverde, V., & Mihaila, T. (2015). Differences in Academic Specialization Regarding Stressor Perception, Coping and Stress Effects Perception in Young Students. *Procedia - Social and Behavioral Sciences*, 203, 433-437. <https://doi.org/10.1016/j.sbspro.2015.08.320>
- Argudo, J. (2021). Expressive Writing to Relieve Academic Stress at University Level. *Profile: Issues in Teachers' Professional Development*, 23(2), 17-33. <https://doi.org/10.15446/profile.v23n2.90448>
- Basith, A., Rahman, M. S., & Moseki, U. R. (2021). The relationship among academic self-concept, academic self-esteem, and academic achievement. *Konselor*, (10 (2), 36-42. <http://ejournal.unp.ac.id/index.php/konselor/article/view/111813/105799>
- Bergmann, C., Muth, T., & Loerbroks, A. (2019). Medical students' perceptions of stress due to academic studies and its interrelationships with other domains of life: a qualitative study. *Medical Education Online*, 24(1), 17-33. <https://doi.org/10.1080/10872981.2019.1603526>
- Chacón-Cuberos, R., Padial-Ruz, R., González-Valero, G., Zurita-Ortega, F., & Puertas-Molero, P. (2019). Motivación y estrategias de aprendizaje en estudiantes de grado en Educación Primaria: análisis según factores académicos y hábitos saludables. *Sportis. Scientific Journal of School Sport, Physical Education and Psychomotricity*, 5(3), 469-483. <https://doi.org/10.17979/sportis.2019.5.3.5465>
- Chinaveh, M., Ishak, N. M., & Salleh, A. M. (2010). Improving Mental Health and Academic Performance through Multiple Stress Management Intervention: Implication For Diverse Learners. *Procedia – Social and Behavioral Sciences*, 7, 311-316. <https://doi.org/10.1016/j.sbspro.2010.10.043>
- Elias, H., Ping, W. S., & Abdullah, M. C. (2011). Stress and Academic Achievement among Undergraduate Students in Universiti Putra Malaysia. *Procedia – Social and Behavioral Sciences*, 29, 646-655. <https://doi.org/10.1016/j.sbspro.2011.11.288>
- Fariborz, N., Hadi, J., & Ali, T. N. (2019). Students' Academic Stress, Stress Response and Academic Burnout: Mediating Role of Self-Efficacy. *Pertanika J. Soc. Sci. & Hum.*, 27 (4), 2441-2454. <http://www.pertanika.upm.edu.my/pjssh/browse/regular-issue?article=JSSH-3103-2018>
- Hamjah, S. H., Ismail, Z., Sham, F. M., Rasit, R. M., & Ismail, A. (2015). Spiritual Approach in Managing Work-related Stress of Academicians. *Procedia – Social and Behavioral Sciences*, 174, 1229-1233. <https://doi.org/10.1016/j.sbspro.2015.01.741>
- Leslie, K., Brown, K., & Aiken, J. (2021). Perceived academic-related sources of stress among graduate nursing students in a Jamaican University. *Nurse Education in Practice*, 53. <https://doi.org/10.1016/j.nepr.2021.103088>
- Magnavita, N., & Chiorri, C. (2018). Academic stress and active learning of nursing students: A cross-sectional study. *Nurse Education Today*, 68, 128-133. <https://doi.org/10.1016/j.nedt.2018.06.003>
- MoghimIslam, M., Jafari, P., & Hoseini, M. A. (2013). Impact of Stress Management Training on the Girl High School Student Academic Achievement. *Procedia – Social and Behavioral Sciences*, 89, 22-26. <https://doi.org/10.1016/j.sbspro.2013.08.803>
- Mulyadi, S., Rahardjo, W., & Basuki, A. M. H. (2016). The Role of Parent-child Relationship, Self-esteem, Academic Self-efficacy to Academic Stress. *Procedia – Social and Behavioral Sciences*, 217, 603-608. <https://doi.org/10.1016/j.sbspro.2016.02.063>
- Picton, A. (2021). Work-life balance in medical students: self-care in a culture of self-sacrifice. *BMC Medical Education*, 21(1). <https://doi.org/10.1186/s12909-020-02434-5>
- Pozos-Radillo, B. E., Preciado-Serrano, M. de L., Acosta-Fernández, M., Aguilera-Velasco, M. de los Á., & Delgado-García, D. D. (2014). Academic stress as a predictor of chronic stress in university students. *Psicología Educativa*, 20(1), 47-52. <https://doi.org/10.1016/j.pse.2014.05.006>
- Shin, J. C., & Jung, J. (2014). Academics job satisfaction and job stress across countries in the changing academic environments. *Higher Education*, 67(5), 603-620. <https://doi.org/10.1007/s10734-013-9668-y>
- Silva, R. G., & Figueiredo-Braga, M. (2019). The Roles of Empathy, Attachment Style, and Burnout in Pharmacy Students' Academic Satisfaction. *American Journal of Pharmaceutical Education*, 83(5). <https://doi.org/10.5688/ajpe6706>
- Suárez-Riveiro, J. M., Martínez-Vicente, M., & Valiente-Barroso, C. (2019). Rendimiento Académico según Distintos Niveles de Funcionalidad Ejecutiva y de Estrés Infantil Percibido. *Psicología Educativa*, 26(1), 77-86. <https://doi.org/10.5093/psed2019a17>

Valdivieso León, L., Lucas Mangas, S., Tous Pallarés, J., & Espinoza Díaz, I. M. (2020). Estrategias de afrontamiento del estrés académico universitario: educación infantil-primaria. *Educación XX1*, 23(2). <https://doi.org/10.5944/educxx1.25651>

### Acknowledgement

The research was carried out in the autumn of 2021. The research was funded by Tomas Bata University in Zlín, Faculty of Humanities within the project no. RO60211011025/2120.

### Contact details:

Mgr. Jana Martincová, Ph.D.  
Department of pedagogical sciences  
Faculty of Humanities  
Tomas Bata University in Zlín  
Štefánikova 5670  
760 01 Zlín, CZECH REPUBLIC  
E-mail: [martincova@utb.cz](mailto:martincova@utb.cz)

PhDr. Iva Staňková, Ph.D.  
Department of pedagogical sciences  
Faculty of Humanities  
Tomas Bata University in Zlín  
Štefánikova 5670  
760 01 Zlín, CZECH REPUBLIC  
E-mail: [istankova@utb.cz](mailto:istankova@utb.cz)

Bc. Michaela Bílá  
Department of pedagogical sciences  
Faculty of Humanities  
Tomas Bata University in Zlín  
Štefánikova 5670  
760 01 Zlín, CZECH REPUBLIC

---

# NEW APPLIED APPROACHES IN OPEN PRISON IN CONVICTED REHABILITATION PROCESS

---

Jaroslav Kříž, Jaroslav Veteška

### Abstract:

In the Czech Republic, adverse data on the high incidence of recidivism are monitored over a long period of time. It is so crucial for the Prison Service of the Czech Republic (VS ČR) to address the effectiveness of the application of innovative treatment methods brought about by the worldwide humanization of prison. The objective of the study presented is to identify and characterize new approaches in the process of resocialization applied to the treatment of condemned men in the Open Prisons facility in Jiřice Prison. The research study was carried out through semi-structured interviews with prison staff, which made it possible to characterize innovative approaches during the resocialization of convicts. The results of the study reveal that the application of methods and activities of the programme for the treatment of prisoners in Open Prison allows significantly more enhancement of social competencies and protective factors in order to achieve an effective process of subsequent reintegration into normal life than the normal output department of prisons in the Czech Republic.

### Key words:

open prison, reintegration, re-education, resocialization, imprisonment

## 1 THEORETICAL BASIS

Currently there is a lack of detailed description of the issues, principles and general functioning of new prison facilities in professional literature. Domestic and foreign studies usually focus mainly on ordinary prisons, where prisoners are isolated from society and subjected to strictly regulated regimes. The philosophy and reality of open prisons (OPs) is mostly misunderstood and unprofessionalised by the lay and professional community, which may be due to the less directive approach of staff

towards inmates, the distorted image of the media and the lack of professional texts that would describe the functioning of these facilities in a proper way (cf. Martí, 2019; Andvig et al. 2020).

It is important to anchor the functioning of the OP facility in the context of the Czech legislative and prison environment. The development of modern European prison systems can be dated back to the end of the Second World War, when the military-political consequences significantly affected the then Czechoslovak Republic. Based on the lessons of dehumanization and inhumane treatment of convicts during 1939-1945, there was a wave of criticism in Europe against the existing methods of punishment and treatment of convicts (cf. Kýr, 2006; Brunová, 2020). Thus, between 1945 and 1965, a massive wave of penal reform took place in Europe, based on a desire to create penal (prison) systems based on humane treatment of convicts and respect for the human rights of prisoners. However, these reforms were delayed as a result of the change in the political set-up of Czechoslovakia (Sovietization of the prison system). In 1960s Czechoslovakia, only some of the modern transnational trends and standards of the prison system were put into practice. This modern shift was highlighted by the adoption of the Minimum Standard Rules for the Treatment of Prisoners in 1960. Significant humanizing tendencies entered correctional practice with the introduction of new educational practices using educators and psychologists, and in this context, a new code for the execution of sentences, the regulation of correctional activities and new penal regulations were adopted in 1961 (Kafková, 2010; Brunová, 2020).

Fundamental changes in the development of the prison system in our country took place after 1989, when there was a departure from the previous system of prison management and a strategic change that aimed to focus its attention on the future and at the same time to map the then current state of the prison system (to identify shortcomings and eliminate them in the future). In this context, it is evident that the Czech prison system was undergoing humanization, which was emphasized by the recognition of the status of prisoners as citizens, in the obligation to preserve their dignity and to ensure appropriate material conditions of life within the framework of the execution of sentences. At the same time, the need to guarantee the fundamental rights and freedoms of the prison population came to the fore and, last but not least, emphasis was placed on the modernisation of prison facilities and the creation of a system of penitentiary care, i.e. the professional treatment of convicted persons (Netík et al., 1991; Brunová, 2020). With this brief historical excursus we show that

modernisation and humanisation<sup>3</sup> in Czech prisons took place until 1989 at least. Thus, fundamental changes took place after the change of the legal regime and the easing of the political situation, when the foundations of the rule of law and the democratic state began to be built, and especially the promotion of the concept of human rights. It is therefore evident that the development of the Czech PS was and is dependent on the broader social context. These events had a significant negative impact on the development of the prison service in the Czech Republic. This can be seen in the long history of open prisons around the world. In other European countries, OPs have been operating since the beginning of the 20th century, e.g. in Sweden, Switzerland, the Netherlands, Britain, etc. (Kaushik a Sharma, 2017).

Along with the evolution of the penal systems of each country and the change in approaches to convicts, different types of open prisons have emerged all over the world (e.g. OP focused on juveniles, OP focused on working with murderers, etc.). A significant spread of OP is evident in European countries such as Denmark, Finland, Germany, Norway, Great Britain, Spain, etc. Nowadays, open prisons are a common part of the world's advanced prison systems and represent one of the ways to effectively use penitentiary models of treatment of convicts and thus reduce the risk of possible recidivism. Open prisons are an indispensable part of prison models, especially in Nordic countries, which are considered the most advanced prison systems in the world (cf. Pakes a Holt, 2017; Martí, 2019; Smith, 2012 Reiter et al., 2018; Liebling et al., 2021).

This innovative element was put into practice in the Czech Republic on 1 November 2017 in Jiříce Prison, which was also in line with the objectives of the "Conception of the Czech Prison System until 2025". The pilot project of treatment in the Open Prison was preceded by many years of negotiations and cooperation with foreign partners of the Prison Service of the Czech Republic. (Prudlová, 2017). In 2016, the Czech Republic carried out the necessary administrative tasks related to the implementation of a pilot project called "Open Prisons" with a target capacity of 104 accommodation places. A total of 17 buildings were constructed with a total built-up area of approximately 4,000 m<sup>2</sup>. It consists of 13 residential buildings, one entrance

---

3 At the beginning of the Czech post-revolutionary era, the humanisation of the Czech prison system was described as the basis for the transformation of the entire system. It was an important topic in the following period and has maintained its importance in strategic and conceptual documents within the Ministry of Justice until the present day. Dirga (2020) Humanization of the Czech prison system through the eyes of its actors.

multifunctional building, one building for operational and technical facilities and one building for administration and professional treatment.

The actual implementation of Phase I, which included the construction of 4 residential units and 1 administrative building, began in early 2017. Construction work started after the selection of the construction contractor in July 2017 and on 13th October 2017 the construction was completed and subsequently handed over for use. The capacity of Phase I of the "Open Prison" is 32 beds (Veteška & Fischer, 2020). The concept of OP is based on the necessary respect and mutual trust between inmates and prison staff. Convicts serve their prison sentences in open prisons under minimal supervision. Thus, the purpose of this study is to characterize and identify applied specific approaches of professional staff to convicts in the process of resocialization.

## 2 RESEARCH METHODOLOGY AND ETHICS:

A qualitative approach was chosen for the present study due to the specific and small number of respondents, which was realized in 2021. The target group of the research were professional prison employees<sup>4</sup> who are directly involved in the implementation of the treatment programme, re-education, re-socialisation and reintegration of persons in OPs. From this group of respondents, 10 respondents were then deliberately selected for semi-structured interviews. As this is a specific research environment, more attention needs to be paid to research ethics. The first step is to obtain the informed consent of the respondents themselves about the entire research process, the voluntariness and above all the anonymization of the data.

However, the ethical procedure does not end with this step; on the contrary, given the specific target group and environment mentioned above, I am aware of the need for ethical vigilance. A contextual approach to ethics has proven useful in prison research in the past (Guillemin & Gillam, 2004). This approach emphasizes a reflexive evaluation of individual steps with regard to ensuring the safety of respondents, and especially of the institutions surveyed (PS CR). Specifically, the

<sup>4</sup> Employees in an employment relationship with the Prison Service pursuant to Act No. 262/2006 Coll., the Labour Code, as amended. Professional employees include: special pedagogue, educator, teacher-therapist, leisure-time pedagogue, psychologist, social worker.

researcher emphasizes critical reflection on the potential impact of the research on the respondents and the research setting with respect to the specific situation in which the researcher finds himself/herself, while motivating researchers to think through potential unintended consequences of their actions while in the field, as well as when interpreting the data collected (Dirga, 2016).

## 3 RESULTS

This section provides an overview of the main results of our study, focusing on (1) identifying and characterizing new approaches applied in OPs from the perspective of professional staff (2) assessing inmates' motivation to change their behavior in OPs. The identified approaches to inmates and inmates' motivations for change are categorized below:

### Change in approaches to convicts in OP

In the interviews, respondents said that the biggest change in the approach to convicts stems from the overall regime in the OV, where the emphasis is on developing the autonomy of convicts to the widest possible extent (e.g. in the area of meals, management of funds, etc.). At the same time, from the obtained research data it is also important to mention the specific environment in which the convicts are located and in which the staff influence the convicts. The primary focus of staff training is to reinforce the protective factors<sup>5</sup> that contribute to reintegration. During this treatment, pro-social patterns of behaviour are reinforced, in accordance with normal social norms, which should also help to reduce the risk of recidivism. The strengthening of these areas occurs through a treatment program that focuses on the individual approach of OP employees. In interviews, respondents most frequently mentioned "accompaniment", which they described as an individual approach applied in intensive work with convicts.

They also added that this process is characterized by clearly defined goals, and methods of professional intervention (e.g. mental hygiene, establishing relationships

<sup>5</sup> These factors mitigate the effects of risk. Their presence increases resistance to the effects of risk factors. They help to increase an individual's resilience to the risk of committing crime by acting in the opposite direction to criminogenic risk. These groups of factors (i.e. risk and protective factors) are in constant interaction and influence each other (Drahý et al., 2018).



outside prison, working with stressful situations, etc.). At the same time, in the context of work with convicts, respondents mentioned the use of the Summary Analysis of Risk and Needs of Convicts (SARNC), a diagnostic tool designed to assess the criminogenic risks and needs of convicted persons placed in various types of institutions. In OPs, according to the respondents, convicts go through each phase individually and it is therefore a semi-open system of treatment. Respondents also stated that from a psychological point of view, they try to act in a pro-social way, which mainly seeks to set appropriate conditions for successful resocialization.

Furthermore, the interviews mentioned several times the cooperation between the various professional staff<sup>6</sup> in the OPs, who take turns in the implementation of programmes for the treatment of convicts. At the same time, there are no members of the Security Service of the Czech Republic (staff in uniform) working with convicts, which is perceived positively by the majority of respondents, as the staff do not act too directive and repressive. However, respondents in the position of educator mention that they have taken over some of the functions<sup>7</sup> held by PS CR staff (warden, inspector of the supervisory service) in a regular prison. Last but not least, the interviewees mentioned that their professional interventions with convicts are positively received by the convicts themselves, as these procedures are as close to civilian life as possible. It is about creating conditions for greater independence<sup>8</sup> and competence of convicts in dealing with ordinary matters in preparation for release. At the same time, this approach helps to get as close to civilian life as possible, which can ensure a smooth and seamless transition to freedom.

## Psychological aspects of the OP environment

The analysis of the interviews further defined an area focused on the specific prison environment, which was frequently mentioned by respondents in the interviews. During the construction of the prison itself, the professional staff worked with the architect to create the most supportive environment in the process of resocialization

---

<sup>6</sup> The staff of the open prison consists of the head of the Department of Correctional Services for the OP facilities, a special educator, a social worker, a psychologist, an educator-therapist, a leisure educator and educators (Prokopová, 2018).

<sup>7</sup> In addition to the normal tasks associated with this function, OP educators are also required to perform activities such as: checking in OP inmates to their individual workplaces (before departure and after their return), keeping a continuous record of the number of inmates, conducting numerical checks of inmates in the morning and evening hours, preparing documents for the distribution of food to inmates, etc.

<sup>8</sup> Strengthening independence also means developing inmates in self-care activities that focus on independent living (e.g. cooking in the fully equipped kitchens that are part of each house, doing laundry, keeping all areas of the house clean, etc.).

and rehabilitation of convicts. Respondents rated this environment as more nurturing than that of regular prison facilities, which they rated as substance-poor, isolating with a desocializing effect. The very aim of the OP environment is to be as close to a civilian environment as possible to ensure a smooth and seamless transition to freedom. One of the tools for achieving this goal is a specific form of housing in family house-type accommodations.

When describing this area, respondents talked about the so-called "training" of living in an ordinary household with all areas (e.g. washing, cooking, ironing, etc.). However, the convicts have to carry out these self-care activities together, which in the future may help them to solve common problems, communicate constructively, cooperate, etc. Furthermore, the psychological effect of the dormitories and the environment (garden, ornamental garden, outdoor gym, outdoor seating), which also has therapeutic elements, was emphasized several times, as the inmate is not in small and crowded rooms with limited movement, as is the case in regular prison facilities.

The presence of animals in prisons can be considered as another tool for the closest approximation to a civilian environment. The use of animals can be seen as a means of therapy used by respondents when working with convicts. Specifically, exotic and farm animals are used, e.g. for training independence, maintaining work habits, responsible behaviour of convicts, gaining new work experience and a new area for further education.

At the same time, in the context of the use of animals in the work with convicts, the respondents mentioned the project "Paw in the Palm of the Hand", which is implemented in OPs in cooperation with the School for Guide Dog Training, Ltd., and the Guide Dog Association, r.a., during which convicts directly participate in the socialization of the puppy of the future guide dog. Through this project, convicts gain motivation to help those in need, strengthen their own responsibility and qualities (e.g. willpower, patience, purposefulness, etc.), and last but not least, according to the respondents, the presence of dogs has a positive impact on reducing tension between convicts.



## Evaluation of the attitude of convicts to work in OPs

In this category, respondents assessed the attitude and motivation of convicts to change their behaviour and subsequently integrate smoothly into society. The process of the mechanism for selecting convicts for the OPs is demanding and subject to a detailed analysis of the potential risks to the convict. Upon entering an open prison, the inmate usually undergoes an initial "testing" phase in which he or she must demonstrate the ability to perform the assigned tasks and carry out the open prison sentence in the prescribed manner.

Only after this stage will the prisoner be allowed to leave the prison premises for a limited period of time. The essential criteria for transferring inmates to OPs may include those who have a minimum of 6 months and a maximum of 18 months remaining in VTOS; the inmate is medically fit for work and his/her health condition allows full participation in the specified activities of the treatment program; and the inmate has not received any disciplinary punishment in the last 6 months prior to the application for placement in OPs; the inmate is motivated for a smooth course of serving his/her sentence in the OP, for active implementation of the treatment programme in the OP, for employment and for a non-criminal way of life after release; the inmate has not tested positive for narcotic drugs, psychotropic substances or alcohol in the last 6 months of serving his/her sentence and the inmate admits to committing the offences for which he/she was convicted. Respondents mentioned these criteria for inclusion in OPs as significant, as only motivated convicts without serious disciplinary offences who have already accepted personal responsibility for their crimes are included in the OP programme.

At the same time, the actual selection of convicts in the OV is followed by a system which was mentioned by the respondent for the position of a special educator, who has the task of familiarizing convicts not only with the structure of the activities of the treatment programme according to the intermediate and final phase, but also with the forms of professional intervention. Convicts are thus perceived by the professional staff as clients who have certain problem areas and things to resolve. According to the respondents' statements, the convicts react positively to the client status as they feel immediate interest in their person and appreciate the offer of support from the prison staff.

This approach is also significantly related to the inmates' communication with the OP staff, which is more frequent, intensive and supportive from the beginning. It was also mentioned several times in the interviews that the application of an increased proportion of professional intervention by the OP staff in the sense of case management and accompaniment makes it possible to create an open and partnership-based approach between convicts and prison staff. At the same time, the interviews show that it undoubtedly requires a higher level of work commitment, motivation and a sense of teamwork on the part of all OP employees. Thus, from their experience in the prison system, respondents assess convicts as highly motivated to change their behaviour, which is supported by specific professional approaches of staff (e.g. coaching, accompaniment, treatment programmes, etc.).

## 4 DISCUSSION

The results of the research show that convicts in OPs have the opportunity to participate in a wide range of activities, i.e. work, educational and therapeutic activities. They can also move freely in the accommodation area of the OP. At the same time, additional spaces for work and therapy are available to them, such as the ornamental garden, the breeding zone and the growing zone. The world-famous open prison Bastøy in Norway (Prokopová, 2020) contributed to the creation of OPs in Czech conditions. This prison is located on an island in the Oslo Fjord, housing a total of seventy prisoners in houses around the northwestern part of the island (Pakes, 2020). Convicts in this prison mainly work in agriculture. The overall island environment, the abundance of nature and livestock, seeks to reproduce a healthy lifestyle that has a strong rehabilitative effect.

This model was thus modified to the conditions of the prison system in the Czech Republic. Along with this environment, specific methods of working with convicts were transferred. In the Nordic countries (Iceland, Denmark and Norway) there are mainly non-directive methods of working with prisoners in open prisons and there is talk of a specific culture in which there is hospitality not only between prisoners but especially between prisoners and staff. Specifically, in these facilities, the social environment is characterized by both hospitality and familiarity between staff and inmates. (cf. Ugelvik, 2011, Pakes, 2015, Pakes, 2020, Shammas, 2014).

This model of approach to convicts is thus taken from these countries and modified to the Czech environment, which is confirmed by the results of the research that identified some of the same approaches of prison staff. Convicts in OPs are obliged to complete various activities of the normal daily programme and to perform set tasks (treatment programmes), while any violation of the order leads to the transfer of the convict from an open prison back to a closed prison (with a normal regime) (Prokopová, 2018, 2021).

The area of vocational work and its effectiveness in OP is not sufficiently researched and in the coming years there is a perspective for further research focused on specific areas, i.e. further education, informal learning, employment of convicts in specific conditions, strengthening the level of communication and information competences, etc. (cf. Behan, 2014; Veteška, 2015; Adamec, 2021), employing convicts in specific conditions, strengthening the level of communication and information competencies, etc. (cf. Giddens, 2015; Walters & Morgan, 2017).

## 5 CONCLUSION

The results of the research characterize the new approaches of PS CR staff to convicts, which are applied in the OP. The need for this change in approach was mainly due to the specific environment. At the same time, these approaches had to be consistent with the legal framework of current standards for working with convicts. This model of working with convicts was thus modified because the prison philosophy applied in the Nordic countries, where this concept is widely used, has different methods of working with these individuals.

In the conditions of the Czech Republic, the method of accompaniment, i.e. the individual approach applied in intensive work with convicts, is most used. Furthermore, conditions are created by the staff for greater independence and competence of convicts in dealing with routine issues in preparation for release. These approaches prevent the emergence of institutionalisation, which is an adaptation to a highly organised way of life in prison, accompanied by a loss of autonomy and initiative. Last but not least, this approach helps to get as close to civilian life as possible, which can ensure a smooth and seamless transition to freedom.

## References

- Adamec, P. (2021). Perception of Own Level of Information and Communication Competencies by Students of Teaching for Secondary Vocational Schools. In *INTED2021: 15th International Technology, Education and Development Conference Proceedings*. International Academy of Technology, Education and Development. pp. 2375-2381 DOI: 10.21125/inted.2021.0510.
- Andvig, E., Koffeld-Hamidane, S., Ausland, L. H., & Karlsson, B. (2020). Inmates' perceptions and experiences of how they were prepared for release from a Norwegian open prison. *Nordic Journal of Criminology*, 1-18. doi:10.1080/2578983x.2020.1847954.
- Behan, C. (2014). Learning to Escape: Prison Education, Rehabilitation and the Potential for Transformation. *Journal of Prison Education and Reentry*, 1(1), 20-31.
- Brunová, M. (2020). *Novodobý vývoj a stav vězeňství v České a Slovenské republice*. Leges.
- Dirga, L. (2020). *Humanizace českého vězeňství očima jeho aktérů*. Plzeň: Západočeská univerzita v Plzni.
- Dirga, L. (2016). Možnosti a úskalí vězeňské etnografie: metodologická reflexe využití vězeňské etnografie v českém kontextu. *Česká kriminologie*, 1(1), 1-12.
- Drahý, F. Hůrka, J. & Petras, M. (2018). *SARPO Charakteristiky odsouzených v českých věznicích*. Praha: Vězeňská služba České republiky.
- Drake, D. H. (2012). Prisons, Punishment and the Pursuit of Security. *Basingstoke: Palgrave Macmillan*, <http://dx.doi.org/10.1057/9781137004833>.
- Giddens, T. (2015). Criminal Responsibility and the Living Self. *Crim Law and Philos*, 1, 189-206. DOI: 10.1007/s11572-013-9212-2.
- Hardy, K. (2011). Bright Lines and Open Prisons. *Alternative Law Journal*, 36(1), 4-9. doi:10.1177/1037969x1103600102.
- Liebling, A., Johnsen, B., Schmidt, B. et al. (2021). Where Two 'Exceptional' Prison Cultures Meet: Negotiating Order in a Transnational Prison, *The British Journal of Criminology*, 61(1), pp. 41-60, <https://doi.org/10.1093/bjc/azaa047>.
- Kafková, A. (2010). Cesta ke vzniku generálního ředitelství VS ČR 1865–1965. In *Historická penologie*. Praha: Vězeňská služba České republiky.

Kaushik, A. & Sharma, N. (2017). Human Rights of Prisoners: A Case Study of Sampurnanad Open Prison, Sanganer, Rajasthan. *The International Journal of Political Science*, 3(1) doi: 10.21088/ijpos.2454.9371.3117.1.

Kýr, A. (2006). Věznění a vězenství. *Historická penologie*, 1(1), 1-4.

Martí, M. (2021). Prisoners in the community: the open prison model in Catalonia. *Nordisk Tidsskrift for Kriminalvidenskab*, 106(2), 211–231. <https://doi.org/10.7146/ntfk.v106i2.124777>.

Netík, K. (1991). *Vybrané kapitoly z forenzní psychologie pro právníky*. Praha: Karolinum.

Pakes, F. & Holt, K. (2017). Crimmigration and the prison: Comparing trends in prison policy and practice in England & Wales and Norway. *European Journal of Criminology*, 14(1), 63-77. doi:10.1177/1477370816636905.

Pakes, F. (2020). Old-fashioned Nordic penal exceptionalism: the case of Iceland's open prisons. *Nordic Journal of Criminology*, pp. 1-16. doi:10.1080/2578983x.2020.180919.

Pakes, F. (2015). Howard, Pratt and beyond: Assessing the value of carceral tours as a comparative method. *The Howard Journal of Criminal Justice*, 54(3), 265–276. <https://doi.org/10.1111/hojo.12127>.

Pakes, F. & Holt, K. (2017). The Transnational Prisoner: Exploring Themes and Trends Involving a Prison Deal With the Netherlands and Norway. *The British Journal of Criminology*, 57(1), 79-93, <https://doi.org/10.1093/bjc/azv104>.

Prokopová, H. (2018). *Otevřená věznice Jiřice*. Interní materiál. Jiřice: Věznice

Prokopová, H. (2021). *Nové přístupy v penitenciární péči – model Otevřené věznice Jiřice*. Rigorózní práce. Praha: Univerzita Karlova.

Reiter, K., Sexton, L. & Sumner, J. (2018). Theoretical and empirical limits of Scandinavian Exceptionalism: Isolation and normalization in Danish prisons. *Punishment & Society*, 20(1) pp. 92-112. doi:10.1177/1462474517737273.

Guillemin, M. & Gillam, L. (2004). Ethics, Reflexivity, and “Ethically Important Moments” in Research. *Qualitative Inquiry*, 10(2), 261-280. doi:10.1177/1077800403262360

Smith, P. S. (2012). A critical look at Scandinavian Exceptionalism: Welfare state theories, penal populism, and prison conditions in Denmark and Scandinavia.

In: Ugelvik, T, Dullum, J (eds) Penal Exceptionalism? *Nordic Prison Policy and Practice*. New York, NY: Routledge, pp. 38-57.

Shammas, V. L. (2014). The pains of freedom: Assessing the ambiguity of Scandinavian penal exceptionalism on Norway's Prison Island. *Punishment & Society*, 16(1), 104-123. <https://doi.org/10.1177/1462474513504799>

Ugelvik, T. (2011). The dark side of a culture of equality: Reimagining communities in a Norwegian remand prison. In: T. Ugelvik & J. Dullum (Eds.), *Penal exceptionalism? Nordic prison policy and practice* (pp. 121-138). Routledge.

Veteška, J. (2015). *Mediace a probace v kontextu sociální andragogiky*. Praha: Wolters Kluwer

Veteška, J. & Fischer, S. (2020). *Psychologie kriminálního chování: vybrané otázky etiologie, andragogické intervence a resocializace*. Praha: Grada.

Walters, G. D. & Morgan, R. D. (2017). Assessing criminal thought content: preliminary validation of the criminal thought content inventory (CTCI). *Psychology, Crime & Law*, 1, 1-18. DOI: 10.1080/1068316X.2017.1396333.

#### Acknowledgements:

The study was supported by the project of the Charles University Grant Agency (No. 302221– Psychosocial aspects of further education of convicts in the context of docility).

This paper was supported by COOPERATIO (programme of Charles University, Faculty of Education, 2022-2026).

#### Contact details:

PhDr. Mgr. Jaroslav Kříž, MBA  
 prof. PhDr. Jaroslav Veteška, Ph.D., MBA  
 Department of Andragogy and Educational Management  
 Faculty of Education  
 Charles University in Prague  
 Myslíkova 7,  
 110 00 Prague 1, CZECH REPUBLIC  
 E-mail: jaroslav.kriz@pedf.cuni.cz

---

# IMPACT OF THE PANDEMIC ON EDUCATION

---

Lenka Pasternáková

## Abstract:

In connection with education and training, it is important to accept interdisciplinary penetrations, to stimulate and develop pupils 'and students' skills of critical thinking and thinking in context. It is important to look at the subject matter, which we pay attention to in our text, from the perspective of several social sciences and humanities in their applied form. These are pedagogy, sociology, political science, philosophy, ethics, psychology and law. In this context, it is important to continuously cultivate personality and thus provide a solid foundation not only for one's own professionalism, as a unity of expertise and morality, but also to prepare future graduates for life in society as active citizens.

## Key words:

Education, educational process, pandemic, distance learning, teacher.

## 1 INTRODUCTION

*"Everyone who flatters me is my enemy. Everyone who criticizes me is my teacher. "*

*Chinese proverb*

Today's society, for which social media is becoming an increasingly important reality, is characterized by several fundamental attributes that are directly related to the presence of social media. The network of these links then spreads information easily and quickly, the importance of which is growing significantly for today's society and at the same time the "versions of the truth" multiply, homogeneity turns into heterogeneity and matters become fragmentary. This is the starting point for examining the nature of power in social media. In the case of the mass media, power

was exercised from a single point and producers were clearly distinguished from consumers of information (Zahatňanská, Nagy, 2020; Veteška, Kříž, Koubek, 2020).

## 2 THE MISSION OF THE SCHOOL TODAY

The formulation of the mission should be unique for each school, because each school operates in a different environment, has a different teaching staff, subject of activity and different goals. The mission of the school should be focused on the students of the school rather than on the offered educational program. Based on the mission, the school defines its long-term goals. Awakening and fulfilling the needs, desires and wishes, expectations of students, their satisfaction is the main mission of the school. It is a generally accepted opinion that the primary mission of the school is to educate and educate students and thus prepare them for life – personal, family, social or work, states Vašutová (2007) and Foldi (2021). Sometimes the values of a school are also defined as part of the mission. T

These are the qualities we care about, they represent the highest priorities and deep inner motives and beliefs. Values are also the basic philosophy on which the school is built. They symbolically express the qualities that are the basis for the behavior of school staff and students. Teaching has an undeniable place in connection with the mission and role of the school. The teaching or teaching process can be defined relatively simply and unambiguously: students learn, the teacher directs (leads) their learning activities. It is usually simply defined in this way. But teaching is also a process of interaction of a large number of factors and many relatively complex processes. Many elements enter into it, a number of different events take place in it, the most diverse situations intersect in it. Even if we use this simple definition, based on Turek (2014, p. 49) - students learn, the teacher guides, it is necessary to ask specific questions:

- How does the student learn?
- What does success depend on?
- Why are they learning the subject?
- How does the learning process work?
- How does it help students in learning?
- What will he pass on to the students?

Teaching consists of a large number of internal and external operations, as well as a number of different situations that are either prepared or random. Teaching can be described as a multifaceted process (Kolář et al., 2009).

Kolář et al. (2009, p. 71) further states that if we want to analyze the goals in teaching, we should start with the words of J. A. Comenius: Always look from the beginning to the goal. Show it to the student as well. Pay attention to the goal more closely as a means. "In these sentences, J. A. Komenský indicated the basic idea of the need for the goal and also the work with the goal in education and teaching. In his opinion, the goal is the most important element of every act of education. We consider teaching to be a basic process of intentional action on the development of a child and a young person. The principle of the individual approach of the teacher to the student is to prevent the teacher from dogmatically placing his personal ideal equally on everyone. The manifestation of pedagogical care does not have to be the formation of an idol from a pupil. It is the pedagogical ideal of the teacher that can often be more valuable than the fact that the student would reach by natural development, which is also not influenced by the external environment (Miškolciová, 2008; Barnová, Čepelová, Gabrhelová, 2019).

Research at psychological departments has confirmed that there are also negative moments in pedagogical relationships, which relate to the narrower personal area of the teacher, where he feels affected as a person in his human self-confidence, but also the area of the profession, where he also feels affected as a teacher. Such research has also found that students are not mature enough to assess the negativity of the moments they affect their teachers. Teachers, on the other hand, do not evaluate the effect of these negative moments on the part of pupils and students so that pupils and students are informed so that they are not in doubt about their own mistakes and inappropriate actions. At the same time, lack of information on one side or the other, or on both sides, can have serious consequences, not only for the psychological climate in the classroom, but can also help to weaken and reduce the effectiveness of the teacher's educational activity. It can also reduce his pedagogical care for students and weaken the student's self-educational efforts (Porubčanová, 2016; Suharti, Taruno, Khairudin, 2017).

If increased pedagogical care has developed for a teacher, then it deserves attention, especially when it comes to the teacher's relationship to the class and to individual students, according to Urbánek (2005). The principle is almost certain that a teacher



should achieve good results with his or her entire class, not just individuals. Cases such as protectionism should not occur in any school at all. Therefore, it is good if the teacher knows his students, is familiar with their weaknesses and will pay attention to them to improve not only the results of his students, but also his own. That is why the relationship between the teacher as one of the main formators of personalities and students is very important. What can we perceive as problematic?

This is the case, for example, when there is no trust between teachers and pupils, if the pupil is not respected as an individual, the conditions are not created for the development of the pupil's needs, the pupil is afraid to ask for help if conflicts are not resolved adequately. could go on. The interaction style of the teacher, the personality of the pupil and also the rules set by the school and culture, which regulate the behavior of pupils, their performance and the climate in the classroom, have a significant influence on the given situations (Balogová, 2016).

Cooperation in teaching is a very important element in today's education and teaching process, without which the teaching process would not be at a sufficient level. If one of the basic requirements in the field of education is to learn to be with others, i.e. to communicate with others, to cooperate, evaluate, receive and give, to help and also to receive help, the organization of teaching as cooperation or the organization of cooperation in teaching is one of the most important issues of today's school. The use of student cooperation in learning processes is a solution that leads directly to the fulfillment of this key competence. The ever-deepening migration of the population, and therefore also of pupils, is increasingly bringing to school the need to address issues of intercultural education. Teaching cooperation is one of the important means of solving such issues (Kolář et al., 2009).

From the issue of participation in the consequences of social learning in guided learning and from the issue of dialogue in teaching or the understanding of teaching as dialogue, it is only a small step to address the issue of cooperation in teaching. It is mainly cooperation between students, but also cooperation between students and teachers, but the most important is the issue of cooperation between students in learning activities. We consider cooperation in teaching to be an important element of modern teaching, because we consider cooperation in teaching to be a further strengthening of the connection between guided and social learning. We want to strengthen the process of socialization of the personalities of all students through

activities and participation in teaching by supporting the cooperation of students in teaching, says Danek, Sirotová et al. (2009).

The process carried out in the school as the so-called secondary socialization (socialization realized mainly by school, in the stage of school attendance, primary socialization takes place mainly in the family) children, pupils, can be involved in organized joint activities even more significantly. The school's traditional remorse for the lack of individualization in helping children in their development can be overcome, even rejected, by greater pressure on the child's emancipation through joint work, cooperation of students (Kolář, 2009).

### 3 COOPERATION AT SCHOOL

The learning of children, young people, outside teaching, is usually carried out in mutual cooperation, in joint activities. Also, the first stage of socialization always takes place in joint activities or activities with other adults or peers. Also, spending time inside or outside the school takes place in joint activities. We want to say that cooperation or joint activities is not unusual or unnatural for students, on the contrary, it is quite natural. It is mainly about getting this cooperation into a controlled and organized teaching process. It is the absence of cooperation, cooperation in traditional teaching that makes such teaching an unnatural, even artificial, environment for students. The introduction of cooperation into teaching more or less significantly strengthens the development of the effective side of students' personalities.

It is precisely concrete cooperation that strengthens such elements as mutual understanding, understanding, tolerance, social feelings, common joys, but also the resolution of misunderstandings or conflicts. Responsibility for working together is also created. Pupil cooperation in learning activities contributes greatly to the achievement of pupils' target competencies. Cooperation in the student's learning activities at school has another meaning, and that is the development of the student's personality. Joint teaching activity always has a goal. Practical ways of implementing cooperation in learning activities include: group teaching with problem solving, longer-term tasks for a couple or a larger group, etc. (Pirohová, Lukáč, Lukáčová, 2020).



Some authors have a negative view of activities such as different competitions or competition in general in terms of teaching cooperation. In cooperation, the winners are all, while in competitions there is a winner, but also a loser, and sometimes an excellent student can be defeated, he does not have to be the first. Feelings of disappointment, envy or guilt can have a negative effect on the development of the child's or pupil's personality. We would not avoid competition in school conditions for the following reasons: there is cooperation between students in the competitions and mostly at a high level (after all, it is often a competition not only for individuals but also for groups). Competition is quite an organic part of life and not every competition provokes possible hostility, provokes tension, increased effort, or the deployment of free qualities, etc.

*"It turns out that perhaps the best cooperation in teaching is the use of projects and today's traditional group teaching. When working with projects, it is really a comprehensive cooperation."* (Kolář, 2009, p. 49)

The condition, but also the product of cooperation in teaching, is the so-called social skills of students. The condition is precisely because without their certain level, cooperation does not take place, mostly because individuality is sometimes overemphasized at present. They tend to be a product because a certain nature of the activity always creates procedures or ways of acting, which later have the character of established knowledge, even properties. This issue calls for further elaboration. Above all, there is the question of whether it is at all possible to implement pupils' cooperation in learning activities when they do not have sufficiently "developed" social skills. The answer is yes, because students already develop certain social skills through their entry into school, into social teaching, through permanent residence at school. Most importantly, certain abilities and, together with them, attitudes and values are created, with one's own quality of activity.

We therefore assume that quality social skills are developed in the implementation of student cooperation in learning activities. Among other things, it is also one of the senses of cooperative teaching. By working together, students learn many social skills and qualities: personal responsibility, reflection on group activities, providing help and receiving help, basicity associated with tolerance, the ability to acknowledge their mistake and accept another solution, joint search, submission to the accepted organization of activities (Zahatňanská, 2018), (Błazewski, Lewicki, 2011).

In order for the issue of cooperation to be complex, it is important to analyze the issue of cooperation between teachers and students, or students and teachers, not only in the use of cooperation between students. Relative cooperation is based on the helping activities of the teacher and on the pupil's ability to receive this help and evaluate its activity. The cooperation of the teacher has always been here, without which it is not possible to teach any model. Cooperation is important that contributes to the optimal development of each student. This is a question of the whole complex of modernization of teaching, no longer the "talking teacher and the listening student" (Kolář, 2009).

The issues of cooperation in teaching also concern other participants in the teaching: parents, although they participate in it as if indirectly, but their cooperation with the school is very important (Gawryszewski, 2009).

Getting education moving is the task of quality management. Council of Europe statements emphasize that the quality of education should become one of the key objectives of all types of schools and that the quality of education must be ensured at all levels and in all areas of education. The results of education are quite extensive, students acquire not only knowledge but also skills in practice, they specify life values. Some results are long-term, which will show up after a certain time, and some are short-term, which we will forget after a certain time. Some results are measurable, such as skills and knowledge, and some we cannot measure because it is very complex, such as skills.

*"In order for the customer's understanding of quality to be acceptable, functional, to contribute to the development of production, economy, society, it is necessary that there is no monopoly of the producer on the production of a particular product, i.e. j. the market must be dominated by the supply of certain products over the demand for those products"* (Turek, 2014, p. 72).

In education, quality (quality management) refers to the quality of the school, the quality of the teacher, the quality of the teaching process, the quality of the education system, the quality of textbooks, the quality of students and many others. By the term quality of education we mean what makes students happy to learn, something that is a game for them. There are several ways we can increase student performance. In the context of higher education, there are no student performance testing. So far, only the Assessment of Higher Education Learning Outcomes - Feasibility Study,

also called the AHELO project, is being tested. This project focuses on evaluating the quality of higher education. The main goal of this project is to find out whether it is possible to evaluate and compare the results achieved in higher education between different countries, which have different cultures and different languages.

## 4 SCHOOL ENVIRONMENT IN CURRENT SOCIAL CONDITIONS

Due to the pandemic associated with the COVID-19 disease, the current society and the current school environment are characterized by the declension of the terms: distance teaching, resp. education; online learning and offline learning. The Institute of Educational Policy of the Ministry of Education, Science, Research and Sports of the Slovak Republic issued a report under the leadership of Bednárík et al. (2020, listed at [www.minedu.sk/ivp](http://www.minedu.sk/ivp)), who state that we do not currently have comprehensive information on the course of teaching in schools. However, based on sporadic information from schools, parents, children themselves and educational organizations (such as the experience of the Center for Community Organization<sup>1</sup> or Teach for Slovakia teachers), access to education in the current situation varies significantly between schools and also within individual schools.

There is even information that some schools do not teach at all. In other cases, children who do not have an internet connection, for example, are excluded from education and the school is unable to provide them with alternative forms of distance learning. This situation is mainly due to insufficient and unsystematic support for schools. Distance education standards (appropriate forms, curriculum, teaching materials) have not yet been defined and schools have not been given sufficient space to prepare for distance learning (such as in Belgium, Bulgaria or Lithuania, where all forms of teaching are interrupted, so that teachers and teachers, pupils and their families for the conditions of distance education). Accurate data on the readiness of teachers for online teaching are not available, but the international survey TALIS (2018) shows that less than half of teachers in Slovakia feel very well or well prepared only in the use of information and communication technologies in full-time teaching.

Systemic measures are also lacking in the area of making distance education accessible to pupils and students. A large number of children are currently facing obstacles that de facto exclude them from education at the time of school closure. These are mainly obstacles stemming from the socio-economic background of the households they come from - more than 44% of children aged 6 to 11 live in overcrowded households and therefore do not have the physical space to learn. According to estimates from 2018, it may be necessary to provide school meals for almost 110,000 children; At a time when many parents are receiving reduced pay or nursing due to closures, or many have lost their jobs, this number may be even higher.

In addition to providing basic living needs, the provision of food is also important for education – hunger and lack of quality food negatively affect children's ability to learn. Other obstacles may be the specific educational needs of children, the fulfillment of which is not currently systematically monitored. It is not clear to what extent, for example, children with disabilities have access to appropriate technological or teaching aids and support from professional staff or teaching assistants. In 2018, more than 41,000 children with disabilities were educated in schools in Slovakia.

In addition, additional educational and training needs (such as mental illness) may arise in connection with the crisis, and the availability and capacity of school psychologists or counselors may not be sufficient. In the field of online teaching, which is given primary attention by state institutions, private barriers (especially software companies) and some non-governmental organizations working in education, barriers are emerging, especially for pupils and pupils from households with lower socio-economic status. According to IVP estimates, there may be up to 32,000 primary school pupils without an internet connection (the lower limit of the estimate is 23,000) and compared to ordinary households, children from poor majority and Roma households have significantly worse access not only to technological equipment but also worse digital skills.

However, restrictions on access to technology facilities are currently likely to affect a much larger number of children, especially if they share facilities with their siblings or parents working from home. Based on these findings, as well as an overview of measures from other countries, we formulate proposals for measures through which these problems could be eliminated and thus ensure equal access to

education even during the interruption of full-time teaching. In order to ensure the basic conditions for education in the home environment, it is necessary to guarantee the expenditure of food by school catering facilities and to monitor the availability of specific support for children with diverse needs (e.g. provide technologies enabling education for children with sensory or physical disabilities).

Lack of a coordinated approach to the implementation of distance learning and missing standards and guidelines on the forms and extent to which distance learning is provided so that provided access to the education of all children result in the de facto exclusion of many children from education. Although educational practice has not yet been systematically monitored, information from schools, parents, children and educational organizations points to this. According to the available information, there are also cases when the distance is not taught at the school, resp. not all teachers teach. Thus, their pupils do not have to have any or very limited access to education. In other cases, education is provided only to children who have access to the form of distance learning that the school has decided to use.

Therefore, if the school teaches exclusively online, children without internet access are excluded from teaching. Problems also occur when using paper assignments. In some schools, assignments can only be picked up in person at the school. Children living far from school and without the possibility of transport will not get to the teaching materials and during school closures cannot be educated. In other cases, although school assignments are sent, for example, through field social workers or school assistants, it is not certain whether the children have all the necessary tools at home to be able to develop the assignment (for example, writing aids, textbooks, notebooks, etc.).

According to the available information, the uninformed and uncoordinated use of distance learning has a negative impact on children and their parents, but also on the teachers themselves. One of the often announced problems is overwork. For uncoordinated progress at school level, pupils receive a large number of assignments, as a result of which much of the responsibility for education is transferred to parents. In this way, stress can increase in households, many of which are at economic risk of measures to prevent the spread of a pandemic or in which the intensity of violence due to quarantine measures increases. At the same time, the transfer of responsibility for education to parents contributes to an even greater widening of the gap between children from households with higher and lower socio-economic

status (parents with higher education are likely to be able to provide more qualified support for their children).

Excessive burdens on children can also contribute to increased academic stress and health problems. Excessive burdens can also be felt by teachers, which also affects the results and well-being of the students themselves. In addition to the teaching itself, for example, they often have to create new educational materials suitable for distance learning, where possible, some of them undergo distance learning training and there is also information about increasing the administrative burden of school management. The additional burden also falls on teachers, who also have to take care of their own children.

## 5 DISTANCE LEARNING FROM THE PERSPECTIVE OF RESPONDENTS

The primary research goal was to find out the opinions and experiences of respondents related to the implementation of the educational process during a pandemic. We tried to meet the research goal on two levels:

1. Analyze the opinions of respondents – students of secondary vocational schools on the educational process during a pandemic.
2. Analyze the opinions of respondents – teachers of secondary vocational schools on the implementation of the educational process within the pandemic.

To meet the research goal, we decided to use the author's questionnaire, which consisted of closed and open questions. It was addressed to students of secondary vocational schools. We used the method of unfinished sentences to meet another research goal, which concerned the opinions and experiences of respondents – teachers of teachers in education and during a pandemic.

In connection with this issue, we focused our attention on finding out the opinions and experiences of respondents with education within the pandemic period. 128 respondents took part in our research – 54 pupils (42.19 %) and 74 pupils (57.81 %) of secondary vocational schools. Through the questionnaire we compiled, they had the opportunity to express their opinion on the distance form of teaching. In this

context, we took into account that an important factor in the success of distance learning is also the readiness of students to manage it. In the case of pupils at risk of poverty, the potential of their learning may be conditioned by the availability of food and the provision of adequate teaching space. In the case of pupils whose schools carry out distance learning exclusively online, the availability of the Internet and technology, as well as sufficient digital skills, are essential.

Disadvantaged children face access to specific barriers, whose access to education has already been restricted during normal school operations. With the closure of schools and the relocation of education to households, the problems arising from barriers to education may be exacerbated. Respondents to the question related to distance learning most often answered that they rate the distance form as less effective compared to the full-time form (38.28 %). A quarter of respondents rated the distance form of teaching as effective in the survey (25.78 %). A quarter of respondents prefer full-time teaching, according to their answers (22.66 %). 7.03 % of respondents consider the distance form of teaching to be ineffective. 6.25 % of respondents were unable to comment on this issue.

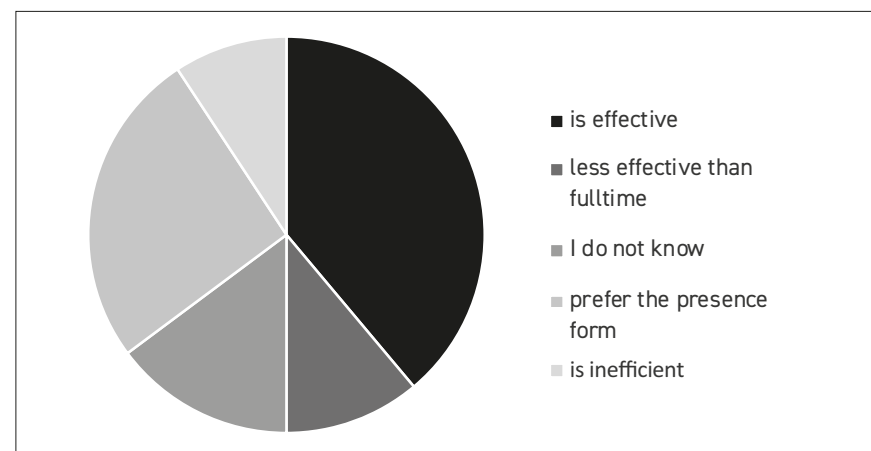
Respondents of secondary vocational school students were also able to comment on the complexity of the distance form of teaching. As many as 72.66 % of respondents rate it as demanding. Girls and boys consider it challenging. 77.03 % of students and 66.67 % of students answered. 18.75 % described distance learning as undemanding. But boys think more than girls. As many as a third of boys (29.63 %) consider distance learning to be undemanding. Only 10.81% of the interviewed girls chose this answer. 12.16 % of respondents could not assess the complexity of the distance form of teaching. Only 3.70 % of boys responded to this answer. It follows from the above that the distance form of teaching is demanding for our respondents. According to the respondents, they rate online education as ineffective. 80.95 % of responses confirmed it. Girls (94.59%) consider online education more ineffective than boys (59.26 %) who participated in the survey. As many as 40.74% of boys said that they considered online education to be effective. Of the girls, only 5.41% of respondents chose this option. No respondent chose the "I can't judge" answer.

**Table 1: Distance learning according to the respondents**

	the boys	the girls	together
is effective	38,89 %	16,22 %	25,78 %
less effective than full-time	11,11 %	58,11 %	38,28 %
I do not know	14,81 %	0 %	6,25 %
I prefer the presence form	25,93 %	20,27 %	22,66 %
is inefficient	9,26 %	5,41 %	7,03 %
together	100 %	100 %	100 %

*Source: Own processing*

**Graph 1: Distance learning according to the respondents**



*Source: Own processing*

Based on the above, we can state that even though the respondents have computers and laptops at home, they have not used them for the direct teaching process. This fact also had a frustrating effect on them, according to them. Over time, however, they have become accustomed to this type of teaching, but direct teaching suits them best. As part of our research survey, we gave respondents the opportunity to comment on the positives of online teaching through an open-ended question. We were interested in their opinions and experiences in this area. Respondents most often appreciated that they did not have to travel to school, saving time and money. Home education suited them.

It turned out that over time, they lacked personal contact with their friends and classmates. Through another open question, we were also interested in reserves or the negative of online teaching, which our respondents recorded. "It's more about self-study, which is partly positive and partly negative, because I feel that more subjects have to study on their own. Teachers assign more tasks. If there is a problem with the internet connection, we do not always see each other well or hear with the teacher." At first we had a problem with the connection, then it was better. On the basis of the research, we can state that the respondents – students of secondary vocational schools lacked personal contact with classmates. They constantly emphasized this fact.

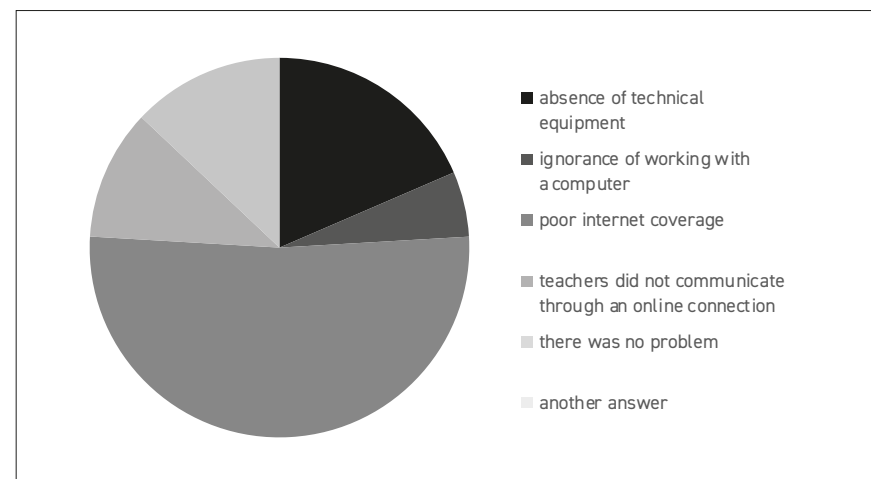
We also asked our respondents what problems they encountered during online education. Respondents cited weak internet coverage as the most common problem (47.66%). The second problem they noticed was the absence of technical equipment (22.65%). As many as 15.63% of respondents said that their teachers did not communicate with them via an online connection. 7.03% stated that ignorance of working with ICT is a common problem. 7.03% of respondents also stated that they did not experience any problems in online education.

**Table 2: Occurrence of problems during online education**

	the boys	the girls	together
absence of technical equipment	18,52 %	25,68 %	22,65 %
ignorance of working with a computer	5,56 %	8,11 %	7,03 %
poor internet coverage	51,85 %	44,59 %	47,66 %
teachers did not communicate through an online connection	11,11 %	18,92 %	15,63 %
there was no problem	12,96 %	2,70 %	7,03 %
another answer	0 %	0 %	0 %
together	100 %	100 %	100 %

Source: Own processing

**Graph 2: Occurrence of problems during online education**



Source: Own processing

Our respondents were also given the opportunity to comment on possible changes in education during the pandemic. "As a student, I felt that when learning was transferred to the online environment, teachers demanded more and placed more demands on students. The exams themselves were more demanding than in school. Many teachers did not want and did not use online meetings, they just sent some texts as an explanation and the students had to learn it without explanation to the teachers. I lacked the same conditions from the teachers. "Training during the pandemic was strenuous as we sat at the computer for five to six hours a day. We didn't have time for anything after that. "I've been at the computer all day. First we had classes and then I did homework the next day. "Based on the testimonials we received from the respondents, it is interesting that they are aware of the threat of the time they spend at the computer. They know the negatives of the Internet and the virtual world. On the other hand, the need for a computer and the Internet is undeniable. Who knows what consequences the quantity of time spent at the computer will have on their physical and mental life. In connection with the effectiveness of the educational process, we currently asked the respondents which methods within the teaching process you think were effective in the current pandemic. In this case, too, they had the opportunity to present their views through an open-ended question, which was part of the questionnaire. "The use of various presentations and videos was effective, especially for practical subjects. Real lessons – a meeting across various platforms, where teachers and students saw each other through cameras. There



are also various activities and exercises in the repetition of the curriculum, which helped us to better understand what was taken over. " "The worksheets that the teachers prepared and the motivational games were interesting."

The child of the third millennium is very technologically advanced, he can find a huge amount of information in a few seconds, get such information that the generations of the 20th century did not even know that such problems and phenomena existed. We can even say that he is quite a "pre-informed" child, who receives a lot of stimuli, a lot of new knowledge, has a lot of partial information, but his knowledge is sketchy and he doesn't even understand many contexts. Children have access to the Internet today. The child of the virtual generation is tired of so much information, motorized, restless, unable to concentrate. Children aged 8 to 10 spend hours at the computer, playing video games, shooting down spaceships, discovering lost worlds, but they themselves are completely lost in the library.

## 6 CONCLUSION

The Internet has given the millennial generation access to people on other continents. It is natural for them to communicate in English and contact a person they have never met in their lives. It is natural for them to look for news about a place they have never visited in a few minutes, buy a ticket, pay for it via internet banking and travel there the next day.

The children of the virtual generation receive advice on portals, information on websites or during telephone communication with people. They publish their privacy on blogs – from their vacations, study problems to intimate experiences, they express themselves openly in discussion forums and have a parallel identity on the net. They want to be independent, but they need guidance and advice. They are not taught to figure out what to do next, because a parent, friend or the internet will help them. We can say that this is an unflattering situation.

## References

- Balogová, B. (2016). Posúdenie v socioterapii na pozadí neistej doby. In *Sociálné práce v nejistých dobách = Social work in uncertain times: zborník vedeckých textů z konferencie XII. Hradecké dny sociální práce*. Hradec Králové: Gaudeamus.
- Barnová, S., Čepelová, S., & Gabrhelová, G. (Eds.). (2019). *Školská pedagogika II*. Dubnica nad Váhom: Vysoká škola DTI.
- Blaziejewski, W. & Lewicki, C. (2011). *Merytoryczne i metodyczne postawy edukacji zawodowej: systemowe ujęcie zagadnień*. Rzeszów: Wydawnictwo Oświatowe FOSZE.
- Danek, J. & Sirotová, M. (2009). *Učiteľské povolanie v podmienkach súčasnej spoločnosti*. Trnava: Vydavateľstvo Michala Vaška.
- Gawryszewski, A. (2021). Špecifiká výchovy a vzdelávania v Európe. In *Sociálna a duchovná revue*. Prešov: Vydavateľstvo Prešovskej univerzity v Prešove. s. 65-68.
- Foldi, F. (2021). Egy sajtós oktatási módszer kihívásai. *Gyermeknevelés: elektronický dokument*. Budapest, roč. 9, č. 2, s. 404-407.
- Kolář, Z. (2009). *Analýza vyučování*. Praha: Grada Publishing.
- Miškolciová, L. (2008). *Syndróm vyhorenia u učiteľov základných škôl a možnosti jeho prevencie*. Banská Bystrica: Univerzita Mateja Bela.
- Pirohová, I., Lukáč, E., & Lukáčová, S. (2020). *Druhošancové vzdelávanie v kontexte politík celoživotného vzdelávania a regionálneho rozvoja*. Prešov: Prešovská univerzita v Prešove.
- Porubčanová, D. (2016). *Education about aesthetic values in selected European educational systems*. Karlsruhe: Ste-Con.
- Turek, I. (2014). *Kvalita vzdelávania*. Bratislava: Wolters Kluwer.
- Urbánek, P. (2005). *Vybrané problémy učiteľské profese: aktuální analýza*. Liberec: Technická univerzita v Liberci.
- Vašutová, J. (2007). *Být učitelem: Co by měl učitel vědět o své profesi*. Praha: Univerzita Karlova v Praze.
- Suharni, Taruno, D.L.B., & Khairudin, M. (2017). Analysis of supporting components for quality standards in teacher education and vocational training. In *Proceedings of the international conference on technology and vocational teachers*, vol. 102, s. 276-281.



Veteška, J., Kříž, J., & Koubek, D. (2020). Možnosti pracovního uplatnění mladých dospělých Romů žijících v sociálně vyloučených lokalitách. In *Vzdělávání dospělých 2019 v kontextu profesního rozvoje a sociálního kapitálu*. Praha: Česká andragogická společnost, s. 187-200.

Zahatňanská, M., & Nagy, M. (2020). An attempt to identify problems in the behaviour of teenagers and adolescents in Slovakia in relation to their creativity and success in the school. In: *AD ALTA journal of interdisciplinary research*. vol 10, no. 1, p. 326-329.

Zahatňanská, M. (2018). Interpersonálne vzťahy medzi členmi rodiny. *Studia Socialia Cracoviensia*. no. 1, s. 37-44. [www.minedu.sk/ivp](http://www.minedu.sk/ivp)

### Acknowledgment

The paper is an output of the project APVV-18-0018 Teaching in Second Chance Schools from the perspective of a teacher and an adult student.

### Contact details:

prof. PaedDr. Lenka Pasternáková, PhD., MBA  
Department of Pedagogy, Andragogy and Psychology  
Faculty of Humanities and Natural Sciences  
University of Prešov  
Ul. 17. novembra 1  
081 16 Prešov, SLOVAKIA  
E-mail: [lenka.pasternakova@unipo.sk](mailto:lenka.pasternakova@unipo.sk)

---

## THE IMPACT OF THE COVID-19 PANDEMIC ON UNIVERSITY STUDIES

---

Silvia Barnová, Slávka Krásna, Gabriela Gabrhelová

### Abstract:

In the proposed paper, the authors deal with the impact of the COVID-19 pandemic on the quality of university studies from the aspect of university students. In the presented qualitative research, university students' attitudes towards distance learning, their experiences gained during the first two pandemic waves, as well as the pros and cons of technology mediated learning as perceived by them are investigated into. The findings show that the participating students observed a decrease in the quality of their studies and would prefer returning to on-site learning.

### Key words:

university studies, university students, COVID-19 pandemic, distance learning, digital technologies, Slovak Republic

## 1 INTRODUCTION

Currently, universities are struggling with the third wave of the COVID-19 pandemic in Slovakia. Even though the situation in schools changes rapidly and with new waves of the pandemic crisis, certain measures are introduced and later repealed, the organization of education at universities does not change as dynamically as in primary and secondary schools. There are several universities in Slovakia that has not returned to on-site education yet and keep delivering courses online.

In Slovakia, after the outbreak of the global COVID-19 pandemic, all schools and school facilities in the country were enforcedly closed on March 16, 2020, and in line with the introduced restrictive measures, education at universities was interrupted. Distance learning was immediately introduced at most of them, which naturally lead to a certain reduction of educational opportunities, educational content, as well as a decrease in the quality of teaching (Zapletal et al., 2021). The new, unprecedented

situation led to “emergency remote teaching”, including teaching, learning, and assessment (Watermeyer, Crick, & Knight, 2021).

The new pandemic reality requires changing and modifying the traditionally applied forms, methods, strategies, and procedures of teaching and their adaptation to the virtual environment (Barnová, Krásna, & Gabrhelová, 2020; Abakumova et al., 2020), as well as their further improvement, which represent a challenge for all stakeholders (Barnová, Krásna, & Gabrhelová, 2021). In that process, it is often forgotten about the fact that university students do not represent a homogenous group (Barnová, Krásna, & Gabrhelová, 2019) and although they are more prepared for distance learning than younger students – technology mediated learning is suitable for motivated, independent learners able to take over responsibility for their learning (Barnová et al., 2020; Barnová, 2021) – distance learning is not necessarily the optimal option for all of them. Therefore, it is very important to consider teachers’ and students’ attitudes and experiences already gained during the pandemic crisis, as these are often decisive from the aspect of success or failure of any introduced strategy.

## 2 METHODOLOGY

Within a larger research study focusing on the impact of distance learning during the COVID-19 pandemic on all levels of schools, we asked 2nd and 3rd year Management students at DTI University in Dubnica nad Váhom, Slovakia to write a brief essay in English entitled “The Impact of the COVID-19 Pandemic on My Studies”. At the University, distance education started in March 2020 and the pandemic situation has not allowed the institution to return to on-site education. Based on the assumption that university students are used to work with digital technologies even under standard, non-crisis situations, we presumed that there was a group of them, for whom technology mediated learning offering opportunities for self-paced, independent learning represents the most suitable alternative for their studies.

Students were not given any instructions regarding the required content of the essay; they could freely express their opinions and share their experiences. The total number of participants was 57 (30 female and 27 male students). Essays were assigned to students in two rounds – in the winter semester in 2020, when 23 essays

were collected – 15 female and 8 male students participated. The same procedure was repeated in the winter semester in 2021 with 34 students (15 females and 19 males) having longer experience with distance learning compared to students in the previous academic year. We applied document analysis, categorized the participating students’ statements, and compared the findings from years 2020 and 2021. Repeating the investigation one year after the first one gave us a unique opportunity to find out about the existence of a shift in students’ opinions and their attitudes towards distance learning between the first two pandemic waves, which was one of the partial goals of the research.

## 3 RESULTS

At the first stage of the essay analysis, we focused on students’ attitudes towards distance learning during the pandemic crisis as such and four groups of respondents were created. Although there were students who were satisfied with studying remotely for a certain period of time and would welcome the implementation of selected distance learning activities (see also Puljak et al., 2020) even under standard conditions (“*This style of studying suits me the best because I have also time to do thing which I like such as my work.*”; “*Nevertheless, the distance form of study that takes place electronically, basically suits me.*”; “*I would welcome this form of education for some learning subjects under normal circumstances too.*”; “*Studying is a little easier.*”) and considered online learning a time and cost saving alternative (“*I see great benefits in travel expenses, flexible time management and opportunity to still study during the pandemic.*”; “*The distance form of study saved me from traveling and losing my working time at my job.*”; “*Distance learning saves me time.*”), thanks to which they can stay in their households (“*It is a fact that I feel sheltered and comfortable in my own home where I can study with more flexible schedule.*”; “*The advantage is that we don’t have to put on make-up, we don’t have to dress decently but only comfortably and simply.*”; “*We don’t have to travel to school in bad weather.*”); there were also students whose attitudes were strictly negative (“*This year is like a nightmare.*”; “*Online learning doesn’t really suit me.*”).

An interesting finding is that in one case, a female students explained that despite her initial dissatisfaction with learning online, she appreciated the opportunity to study in her home environment when she was on maternity leave. The third group

was formed by students, who accepted online learning as a necessity or something that could not be avoided in times of crisis (*"If the pandemic strikes again, I am going to be well prepared."*; *"It is enough to have an open mind for new things and not to be afraid of changes in our lives."*; *"I try to perceive things as best I can in these uncomfortable times."*; *"Everything has its own pros and cons, but as long as the COVID-19 virus will last, we have no other option but to study online."*; *"It was difficult, but we had no choice but to get used to it."*; *"... lessons that were simple in person are now very difficult online and vice-versa."*) and admitted, that the same situation might occur in the future as well.

Students in this group got used to the new situation (*"We realized that everything is possible."*; *"All of these changes to my everyday life were very stressful at first, but I have really learned to work in these conditions pretty well over time."*), but there was one student who was afraid of returning to on-site learning and meeting their teachers face-to-face (*"I've become accustomed to the current way of teaching, and I'm already stressed when I have to face the examiner in person."*). Two students – forming the fourth group of respondents – considered distance learning the future of university education (*"New study opportunities had opened for us."*; *"Covid-19 situation influenced the quality of our studies, but it can be a trend of study in the future."*; *"I appreciated a lot this online study, because I mean it is a future in education around a world."*), but, on the other hand, it must be noted that they preferred on-site learning as well.

At the second stage of document analysis, we tried to reveal factors having an impact on students' attitudes and our goal was to identify the pros and cons of technology mediated learning as indicated by respondents. The participating students complained about the quality of technology mediated learning when compared to on-site learning (*"If we didn't study remotely, we would have learned more."*; *"Studying is more difficult because it is basically self-study."*; *"... the traditional method of teaching is more suitable for my individual learning style."*) and found it more difficult to understand the topics presented in the virtual environment (*"It's challenging for me because when I was self-studying, I often came across a lot of questions that I had no one to ask."*; *"Studying over the internet is more comfortable but harder to understand."*; *"It is harder for me to learn online than at school."*).

It can be caused by a loss of focus, concentration and motivation – as reported by students (*"... students have no motivation to concentrate"*; *"I clearly focused more on the lecture at school than at home."*; *"Learning takes me longer and my motivation is lower."*; *"I concentrate worse at home with my family."*). Students were worried about writing

their Bachelor theses and taking final exams as they did not feel prepared (*"Now we are in the third year and next year we have a bachelor's thesis, and I can't imagine writing it without going to school and consulting it with a teacher."*), which can be considered a serious issue as – alongside with a perceived decrease in the quality of acquired knowledge – it might also indicate a certain loss of self-confidence.

In the analysed essays, also an unexpected negative factor representing a barrier to efficient learning occurred – students complained about a limited access to resources (*"Studying is a lot more difficult because it is not so easy to get information."*; *"... And you don't get the books you need either, mostly they are only available at the school. Or they are sold out and you could get the books from older students, but that doesn't work either, of course, you often don't know them personally or you have no contact with them."*). This is a challenge not only for the University but also for individual teachers who should rely on resources available to students or allow them online access to study materials.

Based on the above, we can claim that students found more negative than positive factors in learning online. It is interesting, that only one student complained about technical issues (*"... problem with internet connection ..."*), none of other students mentioned access to live-streamed lectures or seminars as a problem. In the field of working in the digital environment, similarly to Hayat et al.'s (2021) findings, also insufficiently developed digital skills or initial problems with working in MS Teams were reported (*"We had to get used to it and it wasn't easy. The first attempts at online communication caused us problems, because we couldn't work with it."*), but – in general – we can state that students did not have any serious problems with using digital technologies or with being connected, which can be explained by the fact that they are used to working with digital technologies even under standard, non-crisis circumstances and are also able to take advantage of their limits (*"By the way students are more tempted to cheat on tests because when they don't see a teacher it's easier."*).

One of the most serious issues – as perceived by students – was the experienced lack of social contacts and university life (*"... Covid ruined our social lives."*; *"My most favourite part of school mornings was the ride to school. We went to school with my classmates by bus, sometimes by car. For me it was really fun, because we had a lot of fun and face to face conversations about our lives, e.g. childhood, without any screens and mobiles."*; *"... we are at online classes at home which I believe has greatly cut off our part from our college life."*), which was also reflected in the above discussed perceived quality of distance learning.

Students did not only miss non-mediated interactions with their colleagues, but they also called for face-to-face contact with their teachers and, similarly to Marzoli et al.'s (2021) sample, they observed a decrease in the quality of teacher – student interactions (“*Instead of listening and watching people right in front of me, I am looking on a bunch of pictures and letters on my monitor.*”; “*I've never seen my professors live, just through a laptop screen.*”; “*... discussions help me to understand better what I study.*”; “*If the study materials are not so clear for us, my colleagues or professors can help and explain them better during class.*”; “*I prefer personal contact with professors, teachers, and classmates. It is more authentic when we speak together.*”; “*As an external student, I am used to studying alone, but I miss full-time lectures and seminars at the university.*”; “*Our school is closed for second year and as a university student I have not visited our school yet.*”).

## 4 CONCLUSIONS

Our findings correspond with the results of other research studies focusing on university students' attitudes towards distance learning during the pandemic crisis (Abakumova et al., 2020, Tüchler, 2021, Ismaili, 2021; Darazha et al., 2021), pointing out the pros and cons of distance learning during the pandemic crisis. The presented research findings cannot be generalized for the entire population due to the limits of the conducted research given by the composition and the size of the sample. Therefore, further research in the field is needed.

## References

- Abakumova, I., Zvezdina, G., Grishina, A., Zvezdina, E., & Dyakova, E. (2020). University students' attitude to distance learning in situation of uncertainty. *E3S Web of Conferences* 210, 18017. <https://doi.org/10.1051/e3sconf/202021018017>
- Barnová, S. (2021). Čo nás naučila pandemická kríza? Situácia v stredných školách na Slovensku počas prvej vlny pandémie COVID-19. Týn nad Vltavou: Nová Forma. ISBN 978-80-7612-335-9.
- Barnová, S., Krásna, S., & Gabrhelová, G. (2019). Application of Digital Technologies as a Factor Influencing University Students' Academic Satisfaction. In *ICERI 2019 Proceedings* (pp. 11146-11151). IATED Academy.
- Barnová, S., Krásna, S., Gabrhelová, G. (2020). The Impact of COVID-19 Pandemics on Schools – Challenges and New Opportunities for a Woman-Owned Organization. *Journal of Women's Entrepreneurship and Education*, 3-4, 41-58. ISSN 2406-0674 (online). <https://doi.org/10.28934/jwee20.34.pp41-58>
- Barnová, S., Krásna, S., & Gabrhelová, G. (2021). Teachers' further education in the context of COVID-19 pandemics. In J. Veteška, & M. Kursch (Eds.), *Adult Education 2020 – Reflexion, Reality and Potential of the Virtual World* (pp. 66-71). Proceedings of the 10th International Education Conference, 16 December 2020, Prague, Czech Republic. Praha: Czech Adragogy society.
- Barnová, S., Krásna, S., Gabrhelová, G., & Čepelová, S. (2020). Live-streaming lessons in secondary education during COVID-19 pandemics – Challenges and new opportunities. In *ICERI2020 Proceedings* (pp. 6720-6724). IATED Academy.
- Darazha, I., Lyazzat, R., Ulzharkyn, A., Saira, Z., & Manat, Z. (2021). Digital competence of a teacher in a pandemic. *9th International Conference on Information and Education Technology (ICIET)* (pp. 324-328). <https://doi.org/10.1109/ICIET51873.2021.9419644>.
- Hayat, A. A., Keshavarzi, M. H., Zare, S. et al. (2021). Challenges and opportunities from the COVID-19 pandemic in medical education: A qualitative study. *BMC Medical Education*, 21, 247. <https://doi.org/10.1186/s12909-021-02682-z>
- Ismaili, Y. (2021). Evaluation of students' attitude toward distance learning during the pandemic (Covid-19): A case study of ELTE university. *On the Horizon*, 29(1), 17-30. <https://doi.org/10.1108/OTH-09-2020-0032>

Lajčin, D., & Porubčanová, D. (2021). Teamwork during the COVID-19 Pandemic. *Emerging Science Journal*, 5 (Special Issue) 17, 1-10. <https://doi.org/10.28991/esj-2021-SPER-01>

Marzoli, I., Colantonio, A., Fazio, C., Giliberti, M., Scotti di Uccio, U., & Testa, I. (2021). Effects of emergency remote instruction during the COVID-19 pandemic on university physics students in Italy. *Physical Review Physics Education Research*, 17, 020130

Puljak, L., Čivljak, M., Haramina, A. et al. (2020). Attitudes and concerns of undergraduate university health sciences students in Croatia regarding complete switch to e-learning during COVID-19 pandemic: A survey. *BMC Medical Education*, 20, 416. <https://doi.org/10.1186/s12909-020-02343-7>

Tüchler, A. F. (2021). Learning during the COVID-19 Pandemic The Use. Features and Acceptance of Digital Learning Tools. *Baltic Journal of Modern Computing*, 9(3), 303/332 <https://doi.org/10.22364/bjmc.2021.9.3.06>

Watermeyer, R., Crick, T., & Knight, C. (2021) Digital disruption in the time of COVID-19: Learning technologists' accounts of institutional barriers to online learning, teaching and assessment in UK universities, *International Journal for Academic Development*, <https://doi.org/10.1080/1360144X.2021.1990064>

Zapletal, L., Jankovičová, A., & Kloknerová, L. (2021). Kontext pandémie covidu-19. *Studia Scientifica Facultatis Paedagogicae Universitas Catholica Ružomberok*, 20(5). V tlači.

## Acknowledgement

The authors gratefully acknowledge the contribution of DTI University in Dubnica nad Váhom, Slovakia under the international scientific project IGA VŠDTI No. 001/2021 "New Opportunities for Student Competence Development in the Digital Environment".

## Contact details:

Assoc. Prof. PaedDr. Silvia Barnová, PhD., MBA  
Department of School Pedagogy and Psychology  
DTI University  
Ul. Sládkovičova 533/20

018 41 Dubnica nad Váhom, SLOVAKIA

E-mail: barnova@dti.sk

Assoc. Prof. PhDr. PaedDr. Slávka Krásna, PhD., Ph.D.

Department of School Pedagogy and Psychology

DTI University

Ul. Sládkovičova 533/20

018 41 Dubnica nad Váhom, SLOVAKIA

E-mail: krasna@dti.sk

Assoc. Prof. PhDr. PaedDr. Gabriela Gabrhelová, PhD., DBA, LL.M

Department of Vocational Subject Didactics

DTI University

Ul. Sládkovičova 533/20

018 41 Dubnica nad Váhom, SLOVAKIA

E-mail: gabrhelova@dti.sk

---

# LEGAL EDUCATION OF MILITARY PROFESSIONALS AT THE UNIVERSITY OF DEFENCE

---

Leopold Skoruša, Radim Vičar

## Abstract:

The following contribution deals with the legal education system of students - soldiers within accredited teaching at the University of Defence. It deals with practical observations concerning the legal education of students - soldiers, taught legal disciplines and specific issues of the educational process in the field of law at the University of Defence and its importance for practice. Part of the paper also includes the outputs of the questionnaire survey aimed at evaluating the quality of study in two key legally-oriented courses taught at the University of Defence.

## Key words:

legal disciplines, legal education, student, University of Defence, career soldier/professional soldier

## 1 INTRODUCTION

The following text deals with the issues of military students' education at the University of Defence (UoD), especially with the characteristics and experience in the implementation of their legal education. The changing environment in society, including the development of the international security environment, is significantly reflected in specific impacts on the qualification requirements of members of the armed forces, armed security forces, rescue corps and emergency services ensuring the security of the Czech Republic (Collection of Laws, 1998). Even if this only military college is a relatively young educational and research institution, its roots are dating back to the past. The position of the University of Defence (UoD) as a state military university is irreplaceable in connection with the specific need to train personnel for the defence and security of the Czech Republic. The university



relies on rich traditions, credibility and also on considerable experience in teaching specific courses, including teaching law.

## 2 LEGAL CONSCIOUSNESS AND LEGAL EDUCATION IN GENERAL

The objective of legal education should be to increase students' legal consciousness. Appropriate teaching methods (education), participatory, interpersonal methods are the means to achieve this objective. They introduce students directly to the issues, outline the problems that students deal with individually or in groups in seminars and force them to think about current legal issues, not only in the field of security and defence of the state.

According to Cotterrell (Cotterrell, 2005), two components of legal consciousness can be defined, namely opinion on the law and knowledge of the law. Opinion on the law contains both evaluative elements (emotional and rational value judgments and ideas about law, legal situations) and attitudinal elements, which are to some extent the result of the evaluation process. Values and attitudes are formed over time; provided that the individual has some knowledge, experience and ideas about the law, they can be formed to some extent in the teaching process. Knowledge of law is about cognitive elements, i.e. about the knowledge of what is in accordance with the legal norm and what is in contradiction with it.

Knowledge of law can be further layered into law awareness, which expresses the fact whether or not a legal person is aware that a certain type of behaviour is legally regulated. Another layer of knowledge of law is law acquaintance, i.e. the knowledge of law in the proper sense of the word, factual acquaintance with law (Večeřa & Urbanová, 1996).

These two levels of knowledge of law can be independent of each other (Večeřa & Urbanová, 2015). For example, a soldier is well aware that certain behaviour is regulated by law (e.g. the soldier's legal liability for damage). However, he/she may have very limited knowledge of the content of the relevant legal regulation, e.g. in accordance with Act No. 221/1999 Coll., on Professional Soldiers. This means that he/she is also liable for damage caused to the state by non-compliance with the

obligation to avert damage (Skoruša, 2017). Ideally, the soldier has a detailed idea of how to behave in a particular situation and, moreover, he/she also knows the relevant legal standards well.

## 3 SPECIFICS OF LEGAL EDUCATION IN MILITARY STUDENTS AT THE UNIVERSITY OF DEFENCE

The military profession, including military professional education, has its own specifics. As in any other field of education, the validity of general principles concerning the educational process can be traced in this field. Currently, this process is understood by the Ministry of Defence as a permanent procedure taking place not only by means of its system, but also by means of the experience gained by soldiers, especially from foreign military and peacekeeping missions. The concept of lifelong learning has been introduced, the basis of which is military career courses. It also includes a system of professional, specialized, advanced and other military courses that increase the professionalism of every soldier. Every year, the offer of courses is published in the Bulletin of the Minister of Defence of the Czech Republic.

The University of Defence provides university accredited education in bachelor's, master's and doctoral study programs, the focus of which is military, military-managerial, economic, technical and medical. This educational institution is also a centre of lifelong learning. It also implements the highest non-accredited departmental education, namely in the form of qualifying courses for senior officers and a course for colonels, the so-called General Staff Course. The school is also open to civilian and foreign students. It has an irreplaceable place in the system of Czech universities. It provides education comparable to the education obtained at civilian universities in the Czech Republic.

The military students of the master's study program in Management and Employment of the Armed Forces at the Faculty of Military Leadership as well as the students of the master's study program in Military Technology at the Faculty of Military Technology complete the first part of their studies in programs without differentiation of expert knowledge. The course of Security and Defence Law is intended for all of them as a course of applied basis, with a range of 50 (56) teaching units and an oral examination.

Upon successful completion of the course entitled **Security and Defence Law** a student – soldier will acquire expert knowledge relating especially to the basic concepts of theory of law, constitutional and administrative foundations of the organization and activities of the state, protection of human rights, basic legal regulations and legal institutes in the field of ensuring the security and defence of the state, legal and organizational aspects of the position of a soldier and a commander, including their rights and obligations arising from the legal order of the Czech Republic and internal regulations within the competence of the Ministry of Defence (MoD), including liability relationships. During the exercises, the student will acquire and further develop skills in the interpretation of legal regulations (including those important for the service of a soldier), the application of legal regulations (with an emphasis on the application of legal regulations and internal regulations within the competence of the Ministry of Defence in management and training of its subordinates) and general competences (e.g. to solve basic legal problems independently).

The thematic plan for the study of the course entitled **Security and Defence Law** is adapted to this: The concept of law and the role of law in society; Sources of law and the system of law; Law-making, legal norms, legal relations; Application and interpretation of law; Legal liability, guarantees of legality in the rule of law; The Constitution as a basic legal regulation of the state (Von Bogdandy, A. & Bast, J., 2009); Implementation of the division of power, the constitutional order of the Czech Republic; Legal regulation on the protection of human rights at international, regional and national levels (Von Tigerstrom, B., 2007); Public administration of the Czech Republic, concept, tasks and division; Administrative Procedure - Administrative Procedure Code; Constitutional foundations of ensuring the security of the Czech Republic; Administrative-legal bases of ensuring the security of the Czech Republic; Protection of Classified Information (Dycus, S., Banks, W. C., Hansen, P. R. & Vladeck, S. I., 2020); Definition of conscription; Organization and tasks of the Armed Forces of the Czech Republic; and Legal regulation of the employment relationship of a professional soldier.

All military students at the Faculty of Military Leadership and the Faculty of Military Technology complete the course entitled **International Humanitarian Law** during their studies. It is a course of applied basis with a range of 52 teaching units, which is completed again by an exam. Knowledge of international humanitarian law (the terms: law of war or law of armed conflict are also used as a synonym) is a necessary prerequisite for its observance. Its ignorance can result in numerous wounded or

dead, destroyed civilian infrastructure, unavailability of health care, etc. (Detter, 2000). Dissemination of international humanitarian law is one of the obligations arising for the Czech Republic from international law. Compliance with its standards is one of the basic duties of a soldier under the Act on Professional Soldiers.

By successful completion of the course entitled International Humanitarian Law, military students should acquire the necessary expertise (in particular, of the principles of international humanitarian law, on the principles of victim protection in armed conflicts or the prohibited methods and means of fighting); skills (e.g. to apply the principles of international humanitarian law in the planning and conduct of combat operations and the management of subordinate units, including the so-called Rules of Engagement - ROE); and general competences (e.g. the ability to make decisions as a soldier independently, responsibly and in accordance with international law).

The thematic plan of the course entitled International Humanitarian Law is aimed at the following key issues: Public International Law as a legal order of the international community (Groot, 2005); International Humanitarian Law as part of Public International Law; Rules for conducting combat operations (Dinstein, 2004); Protection of victims of armed conflicts; Detention, internment and protection of prisoners of war (Aeschlimann, 2005); The position and role of the International Committee of the Red Cross, Red Crystal (Bugnion, 2007); Legal regulation for conducting internal conflicts, International Humanitarian Law and peacekeeping operations; Liability for violations of International Humanitarian Law – the most serious crimes under international law (Bryant, 2016); Obligations of the Czech Republic arising from international agreements and membership in international organizations; State Defence Administration and Security Administration – current Issues; and Dissemination of International Humanitarian Law.

During their studies, military students are divided into individual study modules by the Dean's decision. The students in the module Human Resource Management at the Faculty of Military Leadership are intended for the courses Labour Law and Law of Employment Relationship (4th and 5th year, scope 144 teaching units, completed by an exam) and Administrative Law and Liability Relationships (5th year, scope 96 teaching units, completed by an exam). Legal education in these two courses is intended for future military personnel managers. This corresponds to the focus of the courses.

Civilian students and military and civilian students from abroad also have the opportunity to study law at the UoD. They can choose the course called Elements of Law and International Humanitarian Law in English language during a one-semester stay at the UoD. Legal education at the UoD is also carried out within non-accredited teaching in military career courses (in the General Staff Course and in the Senior Officer Course). Here, law education is aimed at specific issues of public international law and international humanitarian law. Further, the professional course entitled Legal Administration of the Army of the Czech Republic takes place regularly at the UoD, which is a two-week course designed especially for legal advisers (Zbořil, Vičar & Skoruša, 2016).

#### 4 QUESTIONNAIRE SURVEY ON LEGAL EDUCATION OF FUTURE MILITARY PROFESSIONALS

Education of university students - soldiers in the field of legal disciplines is a long-term part of the future experts' training in the field of security and defence of the state and the basis for follow-up profile disciplines. As in other fields, it is true that the better the student grasps the general knowledge, the better he will penetrate the profile disciplines.

Based on the conducted **questionnaire survey** related to the student assessment of the course quality entitled **Security and Defence Law** for the 2019/2020 academic year, the following information was found out: the number of possible respondents 170, the number of sent questionnaires 117, which represents 68.8 % of sent questionnaires.

As for the course entitled **International Humanitarian Law**, the survey related to the student assessment of the course quality in the given academic year was conducted at both Brno faculties. At the Faculty of Military Leadership (FML) it was as follows: the number of possible respondents 141, the number of sent questionnaires 25, which represents 17.7 % of sent questionnaires; at the Faculty of Military Technology (FMT), it was as follows: the number of possible respondents 56, the number of sent questionnaires 29, which represents 51.8 % of sent questionnaires.

**Table 1: Percentage expression yes / no / don't know in the student assessment of teaching quality**

	Security and Defence Law(SDL)			International Humanitarian Law (IHL)					
	Yes (%)	No (%)	Don't know (%)	FML			FMT		
				Yes (%)	No (%)	Don't know (%)	Yes (%)	No (%)	Don't know (%)
I believe that successful completion of the course is beneficial for my future profession.	80	5	15	84	4	12	69	31	0
Compared to other courses, this course was more difficult for preparation.	70	6	24	36	24	40	51	48	1
At the beginning of the course, I was acquainted with both the objectives of the course and the requirements and conditions for its successful completion.	87	5	8	100	0	0	93	5	2
The subject matter was not repeated in comparison with the course previously taught.	68	4	28	84	0	16	83	3	14
The teacher was able to explain the given issues.	81	3	16	84	0	16	85	5	10
I consider the teacher to be a real expert in the given field.	85	2	13	79	0	21	82	6	12
The teacher was fair in verifying and evaluating the study results.	79	3	18	74	0	26	89	5	6
The teacher was willing to communicate with students, answer questions and give consultations.	81	2	17	79	0	21	84	2.2	13.8
I had quality study resources available to study the course.	81	1	18	88	0	12	79	0	21
Classrooms and premises, in which the course was taught, are sufficiently equipped with material and technical means and teaching aids.	78	3	19	32	0	68	62	3	35

Source: Authors' own elaboration

## 5 REFLECTIONS AND DISCUSSIONS ON EDUCATING STUDENTS – SOLDIERS AT THE UNIVERSITY OF DEFENCE

The questionnaire survey shows that students – soldiers consider the completion of both the Security and Defence Law course and the International Humanitarian Law course to be **beneficial for their future careers**. In each branch of law, ignorance is the greatest enemy of law adherence. Only an entity that knows its obligations can actively respect them, and only an entity that knows its rights can claim them. This is doubly true in security and defence law and in international humanitarian law – ignorance can have fatal consequences here. That is also why one of its principles is the obligation of all states to acquaint the population with its basic principles already in peacetime.

This concerns not only the education of selected professional groups (especially the armed forces, intelligence services, armed security forces, healthcare chaplains), but also the inclusion of security topics in training activities implemented in the Czech education system. However, the knowledge by itself does not guarantee that subjects will behave according to codified principles. Nevertheless, the school can provide good knowledge in order to contribute to the formation of real attitudes of military and civilian students in practical life.

In both courses, military students positively evaluate **the information about the course, the completion of the course and non-repetition of the subject matter**. In our opinion, the emphasis on this information in the introductory lecture and setting the conditions for completing the course in the syllabus of the course contributes to this. Taking into consideration that Security and Defence Law focuses primarily on national security and defence regulation and International Humanitarian Law is part of public international law, the courses do not duplicate, but complement each other.

When assessing the **complexity of preparation in comparison with other courses**, students are inclined to this evaluation both in the case of International Humanitarian Law course and especially in the case of the Security and Defence Law course. Teaching law presents some specific problems. The large number of rules that these branches of science currently make up makes it difficult to find their way around their content. It is sometimes difficult for lawyers themselves to gain insight into

a given issue; the more it will be very difficult for soldiers who will have to apply these rules. In addition, International Humanitarian Law (IHL) is a set of rules that define the activities of subjects rather in the form of bans. The soldier, by the very nature of his/her preparation and training, is more oriented towards instructions formulated in a positive way. In teaching and training in the field of law of war, it is, therefore, necessary to translate the language of bans used by international documents into a positive language of clear and comprehensible instructions for soldiers.

**The person of the teacher** is perceived by military students as an expert, able to explain the subject matter and willing to communicate with students. In the past, the Department of Social Sciences and Law (2004-2009), the Department of Human Resource Management (2010-2014) and the Department of Economics gradually played an important role in the legal education of military and civilian students at the UoD. The Department of Resource Management and its members have been systematically addressing these security and legal issues for a long time. Also, in the verification and evaluation of study results by the teacher, military students in both courses are equally and unequivocally inclined to the correct approach on the part of the teacher.

The students of the above-mentioned legally focused courses use **study resources** as well as available study texts, the authors of which are the teachers themselves. Students can borrow university textbooks free of charge in the university library (e.g. study texts Fundamentals of Law and selected chapters of international humanitarian law (2015, 2018) or study texts Security and Defence Law (2020)). The **teaching facilities** and technical background are also assessed positively by the students in the above-mentioned survey. Students can also use the university computer room with access to legal information systems (ASPI and CODEXIS).

## 6 CONCLUSION

The training of military professionals and other experts working in the field of state security and defence is being developed at the UoD. One of the objectives is also increasing their legal awareness and shaping their legal thinking. The reason lies, among other things, in the requirements for the level of education of professional soldiers, but also in the fact that the Czech Republic has committed itself to spreading

knowledge of law, especially international humanitarian law, already in peacetime. In the legal education of students - soldiers at the UoD, teachers should pay attention not only to increasing legal knowledge (legal awareness), but they should also have a suitable educational effect in shaping their opinions on the law (attitudes and evaluation of the law).

The aim of teaching and education in the field of law is to equip students with necessary knowledge, skills, abilities and attitudes. At the UoD, legal education is provided by the academic staff of the Department of Resource Management (the Expert Group on Law) within accredited teaching programs, especially in the courses entitled Elements of Law, International Humanitarian Law, Labour Law and Law of Employment Relationship, Administrative Law and Liability Relationships, Administrative law and Security and Defence Law, Security Law, and Elements of Law and International Humanitarian Law (Skoruša, 2017), namely in the non-accredited form of study. The means to achieve the goal is, among other things, the use of appropriate teaching methods, the availability of legislation (ASPI and CODEXIS legal information systems) and legal publications.

## References

- Aeschlimann, A. (2005). Protection of detainees: ICRC action behind bars. *International Review of the Red Cross* [online]. 2005, 87(857), 83-122 [cit. 2021-11-15]. [https://www.icrc.org/en/doc/assets/files/other/irrc\\_857\\_aeschlimann.pdf](https://www.icrc.org/en/doc/assets/files/other/irrc_857_aeschlimann.pdf).
- Bryant, Michael S. *A world history of war crimes: from antiquity to the present*. (2016). London: Bloomsbury Academic.
- Bugnion, François, (2007). Red Cross, Red Crescent Red Crystal. *International Review of the Red Cross* [online]. 1-120 [cit. 2021-11-29]. [https://www.icrc.org/en/doc/assets/files/other/icrc\\_002\\_0778.pdf](https://www.icrc.org/en/doc/assets/files/other/icrc_002_0778.pdf).
- Cotterrell, R. (2005). *The Sociology of Law: An Introduction*. 2nd ed. Oxford: Oxford University Press.
- Detter, I. (2000). *The law of war*. 2nd ed. New York: Cambridge University Press.
- Dinstein, Y. (2004). *The conduct of hostilities under the law of international armed conflict*. Cambridge: Cambridge University Press.
- Dycus, S., Banks, W. C., Hansen, P. R., & Vladeck, S. I. (2020). *National security law*. Aspen Publishers.
- Groot, Hugo de. (2005). *The rights of war and peace*. Indianapolis: Liberty fund. Natural law and enlightenment classics.
- Skoruša, L., R. Vičar & J. Dvořák. (2017). *Elements of law and international humanitarian law: (selected chapters): study material*. Brno: University of Defence.
- Skoruša, L. et al, (2017). *Act on Professional Soldiers: Commentary*. Prague: Wolters Kluwer.
- Večeřa, M. & M. Urbanová. (1996). *Basics of Sociology of Law*. Brno: Doplněk.
- Večeřa, M. & M. Urbanová. (2015). *Legal awareness in a theoretical-empirical perspective*. Brno: Masaryk university.
- Von Bogdandy, A. & Bast, J. (Eds.). (2009). *Principles of European constitutional law*. Bloomsbury Publishing.
- Von Tigerstrom, B. (2007). *Human Security and International Law: Prospects and Problems*. Bloomsbury Publishing.
- Zbořil, T., R. Vičar & L. Skoruša. (2016). Increasing the Key Competencies of a Leader at the University of Defense within the ACR Legal Administration

Course. In: XXXIV International Colloquium on Educational Process Management.  
Brno: University of Defence.

**Contact details:**

Mgr. Ing. Leopold Skoruša, Ph.D.  
Department of Resources Management  
Faculty of Military Leadership  
University of Defence  
Kounicova 65  
662 10 Brno, CZECH REPUBLIC  
E-mail: leopold.skorusa@unob.cz

Mgr. Radim Vičar, Ph.D.  
Department of Resources Management  
Faculty of Military Leadership  
University of Defence  
Kounicova 65  
662 10 Brno, CZECH REPUBLIC  
E-mail: radim.vicar@unob.cz

---

## READING AND DIGITAL STRATEGIES OF STUDENTS (GRADUATES) AT SECONDARY TECHNICAL SCHOOLS

---

Dana Vicherková

**Abstract:**

The paper considers the factors influencing the effectiveness of reading comprehension of paper and electronic texts of students in the final years of secondary school studies. The text focuses on the features of the content of digital reading teaching. The quantitative questionnaire survey on a sample of 365 students from 6 secondary technical schools in the Czech Republic aimed to determine what reading and digital strategies students use concerning the thematic focus of the (e) text and their reading self-concept. Research results suggest that students most frequently gain expert knowledge in the digital space.

**Key words:**

reading strategies, digital strategies, texting, reading, students' reading self-concept

### 1 INTRODUCTION

The current need to support the innovation of education at Czech secondary technical schools and in the broader world context is related to the stimuli related to the development of society 4.0. New trends in education are also connected to innovation and the use of new technologies in engineering – robotics, automation, digitisation, etc. It is necessary to emphasise not only knowledge and professional engineering (technical) skills but also a set of literacy-oriented competencies (e.g., reading, information, digital, environmental, mathematical, scientific, etc.), which form part of the strategic (critical) thinking of educated individuals in secondary education to ensure adequate fulfilment of the current labour market's needs.

Several external and internal factors influence the reading of paper and digital texts by diverse readers. The study aims to determine what reading and digital strategies



are used by technically oriented secondary school students (graduates) in relation to the (e)text's thematic focus and what other factors affect students' reading and digital self-concept. Lim & Toh (2020), a research reflection study on digital reading, emphasised the need for educators to "develop students' knowledge of linear and deep reading strategies, critical information skills and semiotic awareness."

## 2 READING AS A PART OF FUNCTIONAL LITERACY

Reading and writing skills can be understood as ways and means of obtaining new information, knowledge structures usable by individuals in working with text within the functional literacy in the search, processing and evaluation of new knowledge. Průcha, Janík & Rabušicová (2009, p. 67) defined functional literacy as "human equipment for the implementation of various activities necessary for life in contemporary civilisation. It includes literary, documentary and numerical literacy."

Reading and digital literacy play a vital role among the various components of functional literacy, as they are fundamental ways of acquiring and cultivating knowledge, skills and competencies in the principal areas of education. Blažek et al. (2019, p. 12) brought the definition of the term "reading literacy" from the perspective of international research PISA 2018 as "the ability to understand the text, think about it, evaluate it, handle it properly and use it to achieve one's own goals, to develop their own knowledge and potential and active participation in society".

## 3 READING AS A PART OF READING COMPETENCY

Gavora (2020, p. 159) argues that it is possible to understand "reading" as a complex activity requiring knowledge of letters, words, phrases, and printed text conventions. "Trávníček (2019, p. 33) defined reading as "media activity focused on books and their mental appropriation; time devoted to books; basic book-related activity; sociocultural skill or competency." Havlínová (2017) pointed out the reading skills and the importance of contact with various types of texts. The Framework Educational Program for Basic Education (FEP BE) defines the term "key competencies" as "a set of knowledge, skills, abilities, attitudes and values important for the personal

development and application of each member of society" (MEYS, 2021, p. 10). The development of reading literacy in secondary vocational education, i.e. the support of reading competency development, is defined within the general curricular goal of language education (MEYS, 2020a, p. 8) as "the general goal of language education is to develop pupils' communication skills, teach them to use language as a means of communication and thinking, receive, communicate and exchange information, integrate language habits into out-of-school contexts and to develop reading literacy."

The intersection of the development of reading, information and digital competencies in FEP for Secondary Technical and Vocational Education is described as a requirement to "to apply different ways of working with text (especially study and analytical reading), be able to search and process information effectively, be literate by the part "learning competency" (MEYS, 2020b, p. 8). Švrčková (2011, p. 72) understands reading competency "as a complex of competencies consisting of sub-components, including reading skills, reading comprehension of ordinary texts (basic and advanced) and the competency to read literary texts." Tompkins et al. (2014) approach the definition of reading as a complex process of understanding the written text with an emphasis on thinking about the text, interpreting the meaning of the information according to the type and purpose of reading.

## 4 ENDOGENOUS AND EXOGENOUS FACTORS AND READING / DIGITAL LITERACY

Doležalová (2018, p. 10) defined five categories of innate or acquired dispositions and characteristics of the reader, including "anatomical-physiological bases for the origin and development of reading skills and neuropsychological conditions of organs, sensory and psychological functions, motivation and interest in reading, attitudes to texts, concentration and imagination, reading experience, interaction with texts, life experience and knowledge of the topic." Exogenous factors influencing reading literacy include family and school education, the reader's experience with a diverse range of texts, library visits and interaction with information technology/internet context (including social networks).

## 5 INTERNET (DIGITAL) READING CONTEXT AND DIGITAL READING

The Internet has influenced the current concept of reading as an intersection of traditional and non-traditional reading in terms of the diversity of texts, the availability of information, knowledge growth and other characteristics. It offers "a lot of new formats, such as blogs, Facebook reading groups, booktubers, it opened several historical repositories, digital humanities allow to work with large data sets; the Internet itself is becoming a large library, and its benefits for the user became apparent especially in the spring of 2020 during the coronavirus crisis" (Trávníček & Nieč, 2020, p. 574). Jabr (2013) pointed out the lack of a more profound reading immersion in reading digital texts through lower use of metacognitive learning strategies and reading docility. Educators should guide students to work with various texts: structured/unstructured, coherent/incoherent, artistic/non-artistic and printed/digital.

The quality of reading awareness is influenced by the in-depth processing and evaluation of information and the ability to harmonise cognitive and metacognitive processes when working with paper and digital texting, as pointed out by Wolf & Barzail (2009), Salmerón & Garcia (2011), Lauterman & Ackerman (2014). The synthesis of the information to increase the quality of comprehension as an effective method of teaching in-depth (e) reading emphasised the appeal of the importance of the art of asking questions during reading and after reading the text and the so-called "checking contextual and definitive information (2014), Sidi et al. (2017). Cho, Altarriba & Popiel (2015) pointed out the danger of higher cognitive stress through multitasking activities and task switching in the online space. Patterson (2000), Sutherland-Smith (2002) dealt with the thinking of the reading concept, broader conceptualisation, structuring the text into shorter sections and "lateral thinking on topics".

Park & Kim (2016), Lim (2020) argues that the basis for understanding digital text is "to develop students' knowledge of linear and deep reading strategies, including use of printed reading strategies in digital reading." Park & Kim (2016, in Lim & Toh 2020, p. 30) presented three proposals to facilitate the understanding of the digital text, namely "1. by linking information from a paragraph of digital text with another paragraph in the exact digital text, 2. linking information (e.g., definitions and contextual information from another digital text with the current digital world),

3. linking information in digital text with the real-world context. The research by Wolf & Barzillai (2009) pointed out the specificity of developing multimodal semiotic awareness (e.g., interactivity, colour, touch, etc.) in the process of digital reading by Lim & Toh (2020) and Kress (2010).

## 6 RESEARCH METHODOLOGY

A quantitative questionnaire survey was conducted at the Faculty of Education of the University of Ostrava within the TAČR project. The aim of the questionnaire survey on a deliberately selected research sample of 365 students (secondary school graduates) from six Czech secondary technical schools in the Moravian-Silesian Region was to find out what reading and digital strategies secondary school students use in relation to the thematic focus of the (e) text and what other factors affect students' reading and digital self-concept. The structured questionnaire consisted of five parts: professional and performance motivation, key competencies, learning strategies and curriculum, digital and reading competencies, and functional literacy. The questionnaire contained 49 items (37 closed and 12 open items). Twelve technical secondary technical schools were approached to participate in the research; six schools confirmed their participation. Eight closed items were selected for this research study. The researchers visited the individual schools in person. The research focused on problem areas:

1. Ways of acquiring professional knowledge (outside school teaching) for secondary school students.
2. Possibilities of using digital technologies in teaching at secondary school.
3. Student self-concept of digital competencies.
4. The scale of use of reading strategies in students.
5. Self-concept of reading literacy level by students.

## 7 RESEARCH QUESTIONS AND HYPOTHESES

Question 1/28 was: "How (besides teaching) do you acquire professional knowledge?" The larger half, i.e., 62.19 % of respondents, answered they most frequently drew

expertise (besides teaching) from the Internet and social networks, only a third, i.e., 34.25 %, mostly use discussions in a different professional context to obtain necessary information. Only seven students acquired expertise by reading professional literature, and nine did not answer.

Question 2/38 was: "I consider the possibilities to apply my current skills using digital technologies in high school teaching to be considerable/limited." The larger half, i.e., 63.46 % of respondents, considered their possibilities to apply their current skills using digital technologies as substantial. On the other hand, 127 (i.e., 34. 89 %) respondents consider the possibilities to apply their current skills using digital technologies in secondary education to be limited, and six students did not answer the question.

Question 3/38 was: "I consider myself advanced/beginner regarding the level of my digital competencies." The larger half, i.e., 63.46 % of respondents, considered themselves advanced users, while 35.71 % viewed themselves as beginners.

Question 4/A7 was: "Are you discussing the (e)text with someone (at school or home)?" 63.46 % of respondents answered in the affirmative (yes), only 35.16% of respondents did not discuss the (e)text.

Question 5/B2 was: "Do you prefer a particular topic when reading?" 71.15 % of respondents answered in the affirmative. Less than a third, i.e., 27.20 %, did not prefer a particular topic when reading.

Question 6/B5 was: "Do you ask yourself (when reading or after reading the (e) text) auxiliary questions?" 69.78% of respondents answered in the affirmative. Only 29.12 % answered that they did not ask (when reading or reading the (e)text) helpful questions.

Question 7/B6 was: "Are you looking for links about the information from the (e) text?" 60.71 % of respondents answered in the affirmative, only 37.64 % were not looking for associations about the information from the (e)text.

Question 8/D3 was: "Do you think you are literate?" A total of 82.14 % of respondents answered in the affirmative. Only 15.93% of respondents do not consider themselves literate (i.e., they cannot read (e)text with comprehension).

## 8 RELATIONAL RESULTS OF STATISTICAL ANALYSIS OF RESEARCH

The research focused on possible relationships between selected variables. Four hypotheses were tested using Pearson's chi-square. The source data and individual statistical results are given in the following tables. The hypotheses were assessed at the standard significance level of 0.05.

H 1 (Table 1) was confirmed: "Students who stated they prefer a particular topic when reading (more than one) are more likely to ask auxiliary questions (when reading or after reading) the (e)text than students who stated they do not prefer a particular topic during (e)reading." (5 / B2 x 6 / B5)

**Table 1: Observed and expected frequencies (H1)**

Pearson's chi-square = 4.6292167 degree of freedom = 1 significance p= 0.031432			
Question B2	Question B5 (yes)	Question B5 (no)	Line totals
yes	85 (76.69)	174 (182.31)	259
no	21 (29.31)	78 (69.69)	99
Column totals	106	252	358

*Resource: own processing*

H2 was confirmed (Table 2): "Students who looked for an association to the information they read consider themselves literate more frequently than students who have stated that they did not look for an association to the information they read." (7 / B6 x 8 / D3)

**Table 2: Observed and expected frequencies (H2)**

Pearson's chi-square = 4.0087878 degree of freedom = 1 significance p= 0.045264			
Question B6	Question D3 (yes)	Question D3 (no)	Line totals
yes	190 (183.22)	29 (35.78)	219
no	107 (113.78)	29 (22.22)	136
Column totals	297	58	355

*Resource: own processing*

Hypothesis H3 (Tab. 3) stating that: "Students who stated they have the opportunity to apply their current skills with the use of digital technologies in teaching at a technical secondary school discussed the (e)text with someone (teacher) more frequently than students who stated they did not have the opportunity to apply their current skills with the use of digital technologies in secondary school teaching, "was not confirmed. (2/38 x 4 / A7)

**Table 3: Observed and expected frequencies (H3)**

Pearson's chi-square = 0.0620027 degree of freedom = 1 significance p= 0.803358			
Question 38	Question A7 (yes)	Question A7 (no)	Line totals
significantly	44 [45.08]	82 [80.92]	126
limited	83 [81.92]	146 [147.08]	229
Column totals	127	228	355

*Resource: own processing*

Hypothesis H4 (Table 4) stating that: "Students who stated they acquired expertise through an Internet search (including social networks) consider themselves literate more frequently advanced users in terms of acquiring digital competencies than students who stated they do not acquire expertise through an Internet search (including social networks), "was not confirmed. (1/28 x 3/41)

**Table 4: Observed and expected frequencies (H4)**

Pearson's chi-square = 1.5545616 degree of freedom = 2 significance p= 0.459654			
Question 28	Question 41 (beginner)	Question 41 (advanced user)	Line totals
Search on the Internet	86 [81.17]	138 [142.83]	224
Reading professional literature	3 [2.54]	4 [4.46]	7
Discussions in different professional context	40 [45.29]	85 [79.71]	125
Column totals	129	227	356

*Resource: own processing*

## 9 DISCUSSION AND CONCLUSION

Students (graduates) from six Czech secondary technical schools commented on reading and digital strategies concerning the (e)text's thematic focus and other factors influencing students' reading and digital self-concept. The research results pointed out that 62.19 % of students most frequently acquire professional knowledge (apart from teaching) in the digital information e-space on the Internet and social networks. Other research results show that 63.46 % of respondents consider the possibility of applying their current skills using digital technologies in secondary education to be significant, and more than 231 respondents consider themselves to be advanced users in terms of the level of acquisition of their digital competencies.

Only a third, i.e. 35.16 % of respondents, do not discuss the text (s) with someone (at home or school), and only 27.20 % of respondents do not prefer a particular topic when reading. From the positive research findings, it can be mentioned that the majority, i.e., 69.78 % of respondents, ask themselves helpful questions during and after reading (e)text, and 60.71 % of respondents look for associations about the information read. It is optimistic that the majority, i.e., 82.14 % of respondents, consider themselves literate.

**The research confirmed that students who:**

- „prefer a particular reading topic are more likely to ask auxiliary questions (throughout reading or after it)“ (H1).
- „looked for an association to the (e)information consider themselves literate more frequently“ (H2).

**The research did not confirm that students who:**

- „have the opportunity to apply their current skills with the use of digital technologies in teaching at a technical secondary school discussed the (e)text with someone (teacher) more frequently than students who stated they did not have the opportunity to apply their current skills with the use of digital technologies in secondary school teaching“ (H3).
- „acquired expertise through an Internet search (including social networks) consider themselves literate more frequently advanced users

in terms of acquiring digital competencies than students who stated they do not acquire expertise through an Internet search (including social networks)“ (H4).

This paper discussed the impact of reading and digital strategies on paper and digital texts comprehension. Following the results of the research study by Lim (2020), it is clear that teachers at secondary technical schools in interaction with students can influence the quality of comprehension of so-called digital reading through their activities, developing comprehension of various types of texts (including digital). We also consider it crucial to develop in all subjects not only knowledge of linear but also deep reading and digital strategies and develop multimodal semiotic awareness as a prerequisite and potential for dynamising the effectiveness of digital reading in high school students.

## References

- Blažek, R., Janotová, Z., Potužníková, E., & Basl, J. (2019). *Mezinárodní šetření PISA 2018: Národní zpráva*. Česká školní inspekce. <https://www.csicr.cz/cz/Dokumenty/Publikace/Mezinarodni-setreni-PISA-2018-Narodni-zprava>. [Blažek, R., Janotova, Z., Potužníková, E., & Basl, J. (2019). PISA International Survey 2018: National Report. Czech School Inspectorate. <https://www.csicr.cz/cz/Dokumenty/Publikace/Mezinarodni-setreni-PISA-2018-Narodni-zprava>.]
- Doležalová, J. (2018). *Jazyková a literární gramotnost v předškolním věku*. Univerzita Tomáše Bati. <https://fhs.utb.cz/%3Fmdocs-file%3D10360+&cd=1&hl=cs&ct=clnk&gl=cz>. [Doležalová, J. (2018). Language and literary literacy in preschool age. Tomas Bata University. <https://fhs.utb.cz/%3Fmdocs-file%3D10360+&cd=1&hl=en&ct=clnk&gl=en>.]
- Gavora, P. (2020). Cesta ke čtenářské gramotnosti: Znalost konvencí tištěného textu u dětí předškolního věku. *Pedagogika*, 70(2), 157–178. <https://ojs.cuni.cz/pedagogika/article/view/1840>. [Gavora, P. (2020). The Pathway to Reading Literacy: Knowing the Conventions of Printed Text in Preschool Children. *Pedagogy*, 70 (2), 157–178. <https://ojs.cuni.cz/pedagogika/article/view/1840>.]
- Havlíková, H. (2017). *Rozvíjení počáteční čtenářské gramotnosti: Nápadník pro učitele 1. a 2. ročníků základní školy*. [https://clanky.rvp.cz/wpcontent/upload/prilohy/21535/rozvijeni\\_pocatecni\\_ctenarske\\_gramotnosti\\_napadnik.pdf](https://clanky.rvp.cz/wpcontent/upload/prilohy/21535/rozvijeni_pocatecni_ctenarske_gramotnosti_napadnik.pdf). [Havlinova, H. (2017). Developing initial reading literacy: A manual for primary and secondary school teachers. [https://clanky.rvp.cz/wpcontent/upload/prilohy/21535/rozvijeni\\_pocatecni\\_ctenarske\\_gramotnosti\\_napadnik.pdf](https://clanky.rvp.cz/wpcontent/upload/prilohy/21535/rozvijeni_pocatecni_ctenarske_gramotnosti_napadnik.pdf).]
- Cho, K. W., Altarriba, J., & Popiel, M. (2015). Mental juggling: When does multitasking impair reading comprehension? *The Journal of General Psychology*, 142(2), 90–105. <https://doi.org/10.1080/00221309.2014.1003029>.
- Jabr, F. (2013). *The reading brain in the digital age: The science of paper versus screens*. *Scientific American*. <https://www.scientificamerican.com/article/reading-paper-screens>.
- Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication*. London and New York: Routledge.
- Lauterman, T., & Ackerman, R (2014). Overcoming screen inferiority in learning and calibration. *Computers in Human Behavior*, 35, 455–463. <https://doi.org/10.1016/j.chb.2014.02.046>.



Lim, F. V., & Toh, W. (2020). How to Teach Digital Reading? *Journal of Information Literacy*, 14(2), pp. 24-43. <http://dx.doi.org/10.11645/14.2.2701>.

Lim, F. V. (2018). Developing a systemic functional approach to teach multimodal literacy. *Functional Linguistics*, 5(13). <https://doi.org/10.1186/s40554-018-0066-8>.

MŠMT (2020a). *Rámcový vzdělávací program pro obor vzdělání 23 – 51 – E/01 Strojírenské práce*. Retrieved November 18, 2020, from <https://rvp.cz/informace/wpcontent/uploads/2009/09/RVP-2351E01.pdf>. [MEYS. (2020a). Framework educational program for the field of education 23 - 51 - E / 01 Engineering works. Retrieved November 18, 2020, from <https://rvp.cz/informace/wpcontent/uploads/2009/09/RVP-2351E01.pdf>.]

MŠMT (2020b). *Rámcový vzdělávací program pro obor vzdělání 18 – 20 – M/01 Informační technologie*. Retrieved November 18, 2020, from <https://www.edu.cz/wpcontent/uploads/2020/12/18-20-M01-Informacni-technologie-s-revizemi.pdf>. [MEYS. (2020b). Framework educational program for the field of education 18 - 20 - M / 01 Information technology. Retrieved November 18, 2020, from <https://www.edu.cz/wpcontent/uploads/2020/12/18-20-M01-Informacni-technologie-s-revizemi.pdf>.]

MŠMT (2021). *Rámcový vzdělávací program pro základní vzdělávání*. Retrieved November 18, 2020, from <http://www.nuv.cz/file/4982/>. [MEYS. (2021). Framework educational program for basic education. Retrieved November 18, 2020, from <http://www.nuv.cz/file/4982/>.]

Park, H. R., & Kim, D. (2016). English language learners' strategies for reading computer based texts at home and in school. *Calico Journal*, 33(3), 380–409. <http://dx.doi.org/10.1558/cj.v33i3.26552>.

Patterson, N. G. (2000). Hypertext and the changing role of readers. *The English Journal*, 90(2), 74–80. <http://doi.org/10.2307/821221>.

Průcha J., Janík T., & Rabušicová M. (2009). *Pedagogická encyklopedie*. Praha: Portál. [Průcha J., Janík T., & Rabušicová M. (2009). Pedagogical encyclopedia. Praha: Portal.]

Salmerón, L., & García, V. (2011). Reading skills and children's navigation strategies in hypertext. *Computers in Human Behavior*, 27(3), 1143–1151. <https://doi.org/10.1016/j.chb.2010.12.008>.

Sidi, Y., Shpigelman, M., Zalmanov, H., & Ackerman, R. (2017). Understanding metacognitive inferiority on screen by exposing cues for depth of processing. *Learning and Instruction*, 51, 61–73. <http://dx.doi.org/10.1016/j.learninstruc.2017.01.002>.

Sutherland-Smith, W. (2002). Weaving the literacy web: Changes in reading from page to screen. *The Reading Teacher*, 55(7), 662–669.

Švrčková, M. (2011). Počáteční čtenářská gramotnost a klíčové kompetence. [disertační práce, Univerzita Karlova]. <https://is.cuni.cz/webapps/zzp/detail/93138>. [Švrčková, M. (2011). Initial reading literacy and key competencies. [dissertation, Charles University]. <https://is.cuni.cz/webapps/zzp/detail/93138>]

Tompkins, G., Campbell, R., Green, D., & Smith, C. (2014). *Literacy for the 21st Century: A ballanced approach*. Melbourne, Australia: Pearson.

Trávníček, J., & Nieć, G. (2020). Čtenářská kultura. *Česká literatura*, 68(5), 573-591. <https://www.ucl.cas.cz/cs/aktuality/3008-vysla-ceska-literatura-5-2020>. [Trávníček, J., & Nieć, G. (2020). Reading culture. *Czech Literature*, 68 (5), 573-591. <https://www.ucl.cas.cz/cs/aktuality/3008-vysla-ceska-literatura-5-2020>.]

Trávníček, J. (2019). *Rodina, škola, knihovna: Náš vztah ke čtení a co ho ovlivňuje*. Host. [Trávníček, J. (2019). Family, school, library: Our relationship to reading and what influences it. Guest.]

Wolf, M., & Barzillai, M. (2009). The importance of deep reading. *Educational Leadership*, 66(6), 32–37. <http://www.ascd.org/publications/educationalleadership/mar09/vol66/num06/The-Importance-of-Deep-Reading.aspx>.

## Contact details:

Mgr. Dana Vicherková, Ph.D.  
Department of Pedagogy and Andragogy,  
University of Ostrava, Faculty of Education,  
Fr. Šrámka 3  
709 00 Ostrava, CZECH REPUBLIC  
E-mail: [dana.vicherkova@osu.cz](mailto:dana.vicherkova@osu.cz)



---

# PROMOTING SOCIAL CAPITAL AS A MEANS OF MAINTAINING MENTAL HEALTH IN SORROW

---

Beáta Balogová

## Abstract:

The aim of the paper is to outline the benefits of employing social capital for maintaining mental health when experiencing sorrow. The conceptual framework of theoretical analysis is understanding sorrow as a meaningful element in maintaining mental health that is supported formally as well as non-formally (spontaneously) by family members and the surrounding community; the latter making an important part of the social capital.

## Key words:

social work, meaningful suffering, mental health, mental well-being, social capital, therapy

## 1 DEFINING MENTAL HEALTH

World Health Organization (WHO) defined *mental health* as a state of well-being in which an individual can develop their abilities, can cope with stressful situations of everyday life, can work productively, and at the same time can contribute to the community life. At the beginning of the 21st century, a new concept related to mental health emerged. The prominent American expert Martin Seligman (2014), in his positive psychology, instructs us on how to perceive the world, how to see opportunities, not only limitations and obstacles. Seligman (ibid) introduces the expert and lay public to the term *mental wellbeing* and provides for its methodological foundation through defining its five components: positive emotion, engagement, positive relationships, meaningfulness of being, and accomplishments. This *meta-noia*, as the fundamental transformation of human existence, can reveal the original basis onto which a new theory can be mapped.

In social work, therapists increasingly encounter a person who can be referred to as "empty". Seligman (2014, p. 217; my translation) explains: "I ask my clients if they are happy. They tell me they are not. I add that they are empty." He (ibid) provides the reasoning that this is so because the competence needed to experience positive emotions, to become engaged, to lead a meaningful life, to achieve success at work, and to maintain good relationships with one's surroundings are fundamentally different from that not to succumb to depression, anxiety, and anger. These negative relationships interfere with mental well-being; yet, they do not fully prevent it. Likewise, the absence of sadness, anxiety, or anger does not automatically presuppose happiness. Thus, the main learning outcome of positive psychology is that true mental health does not merely imply the absence of mental illness. We often encounter a situation when a person does not suffer from a mental illness, yet s/he is dissatisfied, distressed and fails in health. This is the moment when such a person becomes a social work client.

True mental health necessitates the presence of the components like positive emotions, engagement, meaningful life, success at work, and good relationships. Seligman's theory (2014) is in contrast to Sigmund Freud's theory: Freud based his reasoning on the statement that mental health is primarily the absence of a disease. Freud was an admirer and follower of Schopenhauer,<sup>9</sup> the philosopher. Both were convinced that happiness is only an *illusion* ("fortunately," at present, many relevant happiness theories are available) and that the best we can do in a given situation is to keep our suffering and pain to a minimum. Schopenhauer goes further (in an effort to offer eudaimonologia, while "betraying" his basic metaphysical concept) and, in line with the Aristotle tradition, considers the statement that "a reasonable person seeks pain, not pleasure" to be the highest rule of life wisdom (Plašienková 2005, p. 132; my translation). The situation was similar in the case of physical health, as medicine defined physical health only as the absence of a disease. Even though, on the worldwide scale, but also in Slovakia, much relevant research has proved the correlation of the emergence of e.g. oncological diseases or obesity as a consequence of mental discomfort, only sporadically does the WHO "allow" applying the connection between mental well-being and protection of physical health to its health protection projects.

---

<sup>9</sup> Arthur Schopenhauer lived in 1788 – 1860.

## 2 TREATING THE TERMS SORROW AND MENTAL PAIN

Psychic pain means experiencing mental sorrow or anxiety; it often arises from the loss and frustration. It is accompanied by feelings of guilt, remorse, and helplessness. What is "dangerous" about it is that it can be strong, unrelenting, and even more intense than physical pain. It can lead to complete disintegration of the affected person (Hartl, Hartlová 2004). Plašienková (2005, p. 129; my translation) affirms that the most striking feature of the "mystery" of pain is "contradiction and ambivalence that result in the real paradox of pain, or the paradox of our approaches to pain." In fact, it is complex manifestation of the paradox nature of pain, even of our relationship to it, the final coordinate of which is our direction in life. Another paradox is that pain is sometimes our lifelong companion, sometimes a welcome or endured visitor, and sometimes a part of us.

Unlike mental pain, sorrow is considered to be pain that is long-lasting. However, sorrow can be caused not only by prolonged pain but also by other symptoms. It is often associated with such phenomena as fear, sadness, and remorse. It is always an intervention in the psychic sphere of the suffering person; the person's attitude to suffering and also to their experiencing is manifested here (Plašienková 2005).

It follows that sorrow is most often associated with life transitions, with the loss of a loved one, but also with the loss of self-image when suffering from torture, mobbing, bullying, emotional blackmail, etc.

There's no universal definition for "pain and suffering" in the realm of personal injury law, but the term typically refers to:

- physical pain caused by the accident itself,
- physical discomfort resulting from necessary medical treatment,
- mental anguish, sleeplessness, anxiety, and other more psychological effects of the accident and resulting injuries.

## 3 USING THE INTENSITY OF SORROW MEANINGFULLY

Perhaps the most clear-cut solution is offered by Alfred Adler (1998): he suggests that the meaning of life, the direction of life be reframed through meaningfulness.

Uncovering the ambiguous dimensions of different forms of pain or sorrow, understanding their meaning, but also nonsense, is a task that we encounter once as a challenge, some other time as a necessity, and often as an everyday duty that we perform, postpone, or even ignore. Nevertheless, pain accompanies a person from birth to death, because in the end “life itself is connected with pain at birth, and to live always means to some extent to feel harmed” (Farkašová 2003; my translation).

It is vital that we postulate the necessity of experiencing mental pain and sorrow. Thousands of ways of escaping pain serve as evidence (Plašienková 2005, p. 136); yet they cannot prevent the pain test. Both sophisticated and less demanding, even quite ordinary and mechanical escape attempts are only a temporary “solution” or momentary resignation; they sooner or later disappear, but do not reverse the persistent presence of pain. Pain is always both a “way of being part of the world” and a path we choose and walk.

## 4 THE ROLE OF SOCIOOTHERAPY IN CHANGING PSYCHOLOGICAL PAIN AND SORROW

For more than a century, social work has offered alleviation of mental pain and sorrow through expressive therapies<sup>10</sup>, as an artistic expression of external or internal feelings. As Lištiaková (2016) claims, what is exceptional about these therapies is that they use arts as a means of change in the psyche, emotions, and behavior. Artistic work is intertwined with traditional psychotherapeutic approaches. The important tool of this therapy is using (Balogová 2017) an image, sound, movement, or word with a creative personal charge for self-expression. Such a creative act performed in time and space can be perceived, confronted with, and at the same time changed (Veteška 2010). This activity triggers the healing forces of the organism, when a person gains contact with oneself, with others, and with the world. The application of expressive therapies to sociotherapy towards the client brings changes in physiology; through relaxation, excitement towards positive changes in cognitive processes.

In this context, it is important to realize that the presence of pain in our lives is “an inseparable and completely indelible category. It can be described, it can be

---

<sup>10</sup> In Slovakia, we perceive them only as complementary therapy forms. This was the subject of several published outputs: Balogová (2013); Balogová, Bosá, Šoltésová (2016); Balogová, Hamadej (2016, 2019).

understood, it can be felt, but it cannot be grasped. Pain is one of the mysteries of human existence...” (Strauss 1992; my translation).

In Plašienková’s words (2005, p. 130), on the one hand, pain often hurts and leads to loneliness and isolation; on the other hand, it helps to overcome individualism and egoism, disrupts the alienation around us, and teaches us to sympathize. Thus, pain has the power to hurt and bring closer. We remember it even though we would like to forget it. It turns out that our memory is much “stronger and deeper” in relation to pain, and it also shows its intensiveness in connection with its various forms. This fact, that is, the relationship between memory and pain, takes on concrete forms more or less dependent on our attitude to it.

Social workers should keep in mind that many difficulties are idiosyncratic in nature, and then personal responsibility for them is appropriate. Helplessness creates despair, indifference, and lethargy in people who take over their oppressors’ views, blame themselves, and develop dysfunctional self-defense thoughts and behavior. Useful diagnostics and assessment maintains careful balance between the social and psychological, as “the social work theories avoiding or denying the need for individual change tend to be inappropriate as much as are the approaches reducing all human problems to the level of psychopathology” (Barber, 2003, p. 31; my translation).

## 5 THE ROLE OF SOCIAL CAPITAL IN SORROW

We already know a lot about the role of social capital; we are aware of the societal importance of social support (the whole field of social policy), but also the social support of the client’s environment (family, friends, working and residential community). However, in this context, it is necessary to point out the dialectics of benefits, which reveals the essence, the hidden sense of suffering, also for all persons involved in the social capital.

A rather broad operationalization of social capital distinguishes three forms, namely, bonding, bridging, and linking social capital, with distinct functions. Bonding social capital refers to close relationships between individuals, such as friends or family, and can be driven by culture, religion, ethnicity, and identity.

In the response phase, individual social capital can be defined “As the personal social networks of family, friends, neighbors, acquaintances, and organizations, whom he the individual - perceives as potential or actual provider of assistance during and/or after a disaster. It has two clear components a ‘durable’ social network and the amount and quality of available resources to be passed through the network ties” (Misra et al., 2017, p. 281). This definition points out that networks are a central component of individual social capital, while resources are channeled through these networks during the response.

Despite the diversity, differentiation, and uniqueness of the individual pain and sorrow manifestation, it is the authenticity of experiencing pain and sorrow that unites us all. This experience is, so to speak, communicative, transferable, and timeless, thanks to which we are able to share our being with others. It is also the courage to accept such being, but also the patience to endure it, and thus to sublimate, reshape, and transform it for the purpose of spiritual maturation and growth.

Jeremy Bentham (1831, my translation) emphasizes the importance of others in experiencing mental pain and sorrow by saying, “[t]he only way to ensure a pleasant life is to ensure a pleasant life for others. The only way to ensure a pleasant life for others is to treat them as if we loved them. And the only way to treat someone as if we loved them is to really love them!”

## 6 CONCLUSION AND DISCUSSION

The concluding discussion derives from the fact that sorrow, pain, and misery are practically part of every person's basic life experience, and leads to the understanding of the personality psychology. It is at the base of personality psychology that in difficult life situations the individual finds “secret” resources which help them manage their demands. One of the resources can be, and actually is, social capital or social capital potential.

In 2015, at the Faculty of Arts, University of Prešov, we conducted research on family's coping with the life crisis related to the death of a loved one, on their experiencing sorrow and mental pain (Jankal, Balogová, 2015). The narrative interview method was applied to find out what the family members experience and how they

cope with the loss of a loved one. The research findings confirmed initial shock in all family members, which occurred immediately after the tragedy was reported. In the bereaved, we observed confusion, denial of reality, weariness, aggression, and distrust in the reality of the situation.

The role of social workers is to help the bereaved become aware of the reality of the loss of a loved one, of the consequences of the loss for their future life; to help activate defense mechanisms preventing mental pain and deep suffering in response to the loss; to focus on minimizing irrational feelings of guilt in a family member's death, as well as feelings of not being supportive enough to one's family; to help cope with the grief and loss of a family member multiplied by feelings of loneliness and abandonment. The findings correspond to Taročková's (2005, p. 35; my translation) statement that a general feature in the mourning process is

[t]he tendency to focus on oneself in order to exclude others. One's own intense feelings and emotions are often the only thing an individual can handle, as significant loss results in the emptying of that part of the "self" that has been invested in the lost object. The "Self" is damaged and needs to be protected. However, if the retreat, the withdrawal from social life, persists, the mourning process stops. The individual needs to get out of this introspective phase and pay their attention back to society.

Mental pain and sorrow associated with the loss of a loved one is associated with experiencing the basic stages; starting with shock, through denial and regression, to adaptation.

The research supports the theoretical consideration of the meaningfulness of suffering and the promotion of social capital in that meaningful experiencing of sorrow supported by the closest relatives is important. The next period of our lives can, through this experience, find another deeper dimension of life making sense. The experience of mental pain and sorrow (Plašienková 2005) urges a person to pause properly, repeatedly reflect this complicated phenomenon of our lives again and again, and take a stand on it. In other words, it opens up a new form of knowledge or paths to knowledge that lead to philosophy of life, to basic attitudes, to the recognition of certain life guarantees and to the meaningfulness of life (even the world and the whole of being), into which pain somehow enters naturally (though never completely alone, without "being accompanied", without "stigmas" and "their interpreters").

The difficult path of the oppositeness of mental pain and sorrow is also shown in the fact that the lost and the found associated with pain is always of different kind, affecting us at different times, prepared and unprepared, often startled, confused, imperfect, but always requiring our personal response to pain. We should be aware that the possibilities of our self-identification, maintaining dynamic life continuity and personal integrity, self-affirmation and authentic experiencing of contact with life, with being, becomes updated, paradoxically, also thanks to pain and through pain, thanks to sorrow and through sorrow.

## References

- Adler, A. (1998). *Understanding Human Nature*. Center city, MIN: Hazelden.
- Adler, A. (1998). *O zmysle života*. Bratislava: Iris.
- Adler, A. (1964). *Problems of Neurosis: A Book of Case Histories*. New York: Harper & Row.
- Báčová, V. (ed.). (2008). *Kvalita života a sociálny kapitál - psychologické dimenzie*. Prešov: FF PU v Prešove.
- Barker, R., L. (2003). *The Social Work Dictionary*. Washington, DC: NASW.
- Balogová, B. (2021). *Family Therapies. A case study*. Karlsruhe, Germany: Ste-con, GmbH.
- Balogová, B. (2017). Naratívny prístup. In: B. Balogová a E. Žiaková, (eds.). *Vademecum sociálnej práce. Terminologický slovník*. Košice: UPJŠ v Košiciach, s. 67-68.
- Balogová, B. (2013). Socioterapeutické reflexie realizácie relaxačno-symbolickej terapie v sociálnej práci a možnosti jej eklektických prienikov. X. *Hradecké dny sociální práce. Profesionalita, perspektívy a rozvoj sociálnej práce*. Hradec Králové: ÚSP UHK, s. 433-447.
- Balogová, B. & Hamadej, M. (2018). *Význam interdisciplinarity v socioterapii*. Prešov: Prešovská univerzita v Prešove.
- Beauchamp, T., L. & Childress, J. F. (2013). *Principles of Biomedical Ethics*. Oxford: Oxford University Press.
- Bitter, J. R. & Main, F. O. (2011). Adlerian Family Therapy: An Introduction. *Journal of Individual Psychology*, Vol. 67 (3), 175-185.
- Dreikurs, R. (2009). *Psychologie im Klassenzimmer*. Stuttgart, Germany: Klett-Cotta.
- Farkašová, E. (1998). *Etudy o bolesti a iné eseje*. Bratislava: Vydavateľstvo Spolku slovenských spisovateľov.
- Grint, K. (2014). *Bentham Project*. London: University College London.
- Hamadej, M. & Balogová, B. (2016). *Efektivita socioterapie u mentálne postihnutého dieťaťa*. Prešov: Prešovská univerzita v Prešove.
- Hartl, J. & Hartlová, H. (2004). *Psychologický slovník*. Praha: Portál.
- Jankal, M. & Balogová, B. (2015). *Smútkové poradenstvo v sociálnej práci*. (Diplomová práca). Prešov: FF PU.
- Lištiaková, I. (ed.). (2015). *Terciární vzdělávání v oblasti expresivních terapií v mezinárodním kontextu*. Olomouc: Univerzita Palackého.

- Misra, S., Rupak G., Tandra M., Rabindranath J. (2017). Social Networks in the Context of Community Response to Disaster: Study of a Cyclone-affected Community in Coastal West Bengal, India, *International Journal of Disaster Risk Reduction*, 22: 281-96.
- Seligman, M. E. P. (2004). *"Can Happiness be Taught?"* Daedalus: Spring.
- Seligman, M. E. P. (2011). Doing the Right Thing: Measuring Well Being for Public Policy. *International Journal of Wellbeing*, Vol. 1, No. 1.
- Seligman, M. E. P. (2002). *Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment*. New York, NY: Free Press.
- Seligman, M. (2014). *Vzkvétání*. Příbram: Jan Melvil Publishing.
- Strauss, P. (1992). *Úsmev nad úsmevom*. Bratislava: DAKA.
- Šoltésová, D. & Bosá, M. & Balogová, B. (2016). *Socioterapia v sociálnej práci*. Prešov: Prešovská univerzita v Prešove.
- Podkowińska M. (2018). Aktywny senior – życie towarzyskie, rodzinne i zawodowe seniorów w Polsce, *Journal Socioterapie*, roč. 2018, č. 3, s. 13-21.
- Plašienková, Z. (2005). Zmysel bolesti a utrpenia v živote človeka. *Radost a nádej*. Roč. 8, č. 1, s. 128-136.
- Taročková, T. (2005). *Životné straty a smútenie*. Bratislava: Univerzita Komenského v Bratislave.
- Veteška, J. (2020). *Kompetence ve vzdělávání a strategie profesního rozvoje*. Praha: Česká andragogická společnost.

## Acknowledgement

The paper is published within the research grant project VEGA No. 1/0433/20 Factors of formal and non-formal care in the long-term care system.

## Contact details:

Prof. PhDr. Beáta Balogová, PhD., MBA  
Faculty of Arts, University of Prešov in Prešov  
November 17, No.1  
080 01 Presov, SLOVAKIA  
E-mail: beata.balogova@unipo.sk

# HISTORY INSTRUCTION THROUGH THE PRISM OF RESEARCHERS, EDUCATION POLICY MAKERS AND TEACHERS

Jaroslav Říčan

## Abstract:

The presented theoretical study deals with the issue of history instruction and the subject of its interest in the context of discrepancies between researchers, education policy makers and practicing teachers. The text emphasizes the ontological essence of history, current research in the field of history instruction and the approaches of education policy makers and teachers. The text emphasizes the evidence-based approach for both the system approach and the actual implementation of teaching.

## Key words:

history instruction, history thinking, education policy makers, researchers, teachers

## 1 INTRODUCTION

Beneš (2011) states that the subject of history instruction should be primarily **history consciousness** and **thinking**, including complex cognitive processes that historians use when thinking about the past (Smith, 2017). Freedman (2015) states that, "scholars often define historical reasoning as constructing defensible interpretations of past events." (p. 357). This can be, for example, evaluating the reliability of historical documents, using evidence to formulate historical arguments, or thinking about historical documents as products of the context in which they originated.

Just as Štech (2013) critically reflects the lack of educational and psychological empirical evidence for the emphasis on competencies in the last curricular reform in the Czech Republic (RVP), so Pashler et al. (2007) encourage education policy makers to use evidence-based educational models. In the following text, we try to analyse the subject of history instruction through the prism of researchers, education policy makers and practicing teachers, while drawing attention to the main discrepancies.



## 2 DOMAIN CHARACTERISTICS

First of all, it is necessary to understand the ontological essence of history, on which history education is based. History is multiparadigmatic (Muis et al., 2006) and ill-structured domain (Goldman et al., 2016) which is built on the openness and interpretative nature of the discipline in a social context. The postmodern approach does not grasp history education as learning about what happened, but about the process of giving an account of the past based on evidence; these accounts may be several, including conflicting but still legitimate ones (Wilson & Wineburg, 1993). Monte-Sano (2011) states that it is a reasoning process involving the use of research questions, hypotheses, evidence and arguments, involving other variables such as topic knowledge, historical research experience, metacognitive abilities, or epistemic beliefs.

The idiographical nature of history (humanities) focused on the uniqueness and individuality of the observed phenomenon contrasts sharply with natural sciences (science) revealing universally valid laws. However, with the help of proven working methods and questions, it is possible to come to a qualitatively deeper sources' statement about historical facts, although sources about (accounts of) events in the past may be incomplete, partial or even contradictory. History, then, does not appear to be a mere fictional construct, but a reconstruction of the past based on logical arguments. Despite the pursuit of objective knowledge, the results of the research reflect the experience and attitudes of the historian. This fact necessarily leads to a situation where historians subjectively shape what they interpret (Gaddis, 2002).

## 3 THE CLASH OF EDUCATION POLICY MAKERS AND RESEARCHERS

The discussions show obvious tensions between historians and researchers in the field of history education on the one hand and educational policy makers on the other; these tensions concern history education. At the turn of the millennium, a number of authors (Macintyre & Clark, 2004) highlighted the term "history wars" or, in the German environment, "Historikerstreit" as a societal problem of various narratives of national history. The first group emphasizes critical understanding of history, multiperspectivity, and understanding of the past as a comprehensive set

of information with a strong link to history as a science (Voet & De Wever, 2017). The other group emphasizes democratic accountability, patriotism, loyalty to the state, integration of an individual into existing traditions, and building a national narrative (Wills & Verschaffel, 2012).

History taught in schools then essentially presents a single national story, which was typical of national curricula for most of the 20th century, and the transmission of this story corresponded to traditional approaches in history education (Sheldon, 2012). Such an approach thus results in a content-congested curriculum and the lessons in which, "students take notes and scour textbooks to put facts to memory" (Fogo, 2014, p. 153). On the contrary, researchers dealing with history instruction emphasize the interpretative approach which is currently being reflected in the official curriculum of a number of countries (Australia, Canada, Germany, the Netherlands, USA – VanSledright & Maggioni, 2016) and which involves evaluating multiple sources, discussing conflicting claims, establishing historical significance, using primary sources, recognizing change and continuity, identifying causes and consequences, taking a historical perspective, penetrating the ethical dimension of historical interpretations, and constructing evidence-based reasoning (Seixas & Morton, 2013).

The result is that many researchers seek to create frameworks of historical thinking supported by cognitive research embedded in a social constructivist approach and, based on these, to use them to conceptualize diagnostic tools addressed to pupils and students (DBQ, HATs, HPT, AHAA; see – Reisman et al., 2019). However, these efforts and tools are often in opposition to testing in history lessons by teachers or the ministry, which often requires recall of facts and a description of a historical event, or the tool focuses on other constructs that may support historical thinking, such as reading comprehension, but they are not explicit components of it in recognized models (Smith, 2017).

## 4 THE LEVEL OF TEACHER

Trying to balance both approaches (teaching facts and methods of interpretation) can create tension among teachers which results in a stronger tendency to focus teaching on facts (Zanazanian & Moisan, 2012). McCrum (2013) interviewed 11

history teachers at the beginning of their careers, mapping the differences between *modernist perspectives* (conclusions are built on the facts in the sources) and *postmodern perspectives* (the past is always mediated and it is not possible to represent the past based on historical events), and concluded that most respondents held *modernist perspectives*. James (2008), in a study of future primary school teachers, showed that the reluctance to adopt the interpretative approach to history teaching was due to the fact that teachers found this approach morally ambiguous and therefore harmful (an attempt to “protect” children).

These teacher training students believed that there was a basic-main historical story. According to the respondents, this is an easier way to teach and also less risky (“you don't have to worry about parents getting upset” – Ibid, p. 195). This corresponds with a previous finding by Bohan and Davis (1998) that teacher training students tend to present history in a linear form and as a factual matter. However, the finding draws attention to the dangers of a large number of chronologically structured details which are (may be) confusing for students in the end. In the context of the educational process, the result is a situation in which the student takes a passive role to historical facts and concepts (Stoel et al., 2017) and focuses on external sources of knowledge (VanSledright, 2002a) and this **strong fixation inhibits the student's ability to approach the thinking of a historian** (Lee & Shemilt, 2003).

However, if teachers do not accept that historical knowledge is interpretative in nature, they cannot accept that knowledge is constructed and this affects the way concepts (application of forms and methods) are taught (Wansink et al., 2017). Although it is “generally acknowledged that teachers’ beliefs and knowledge of their subject shape the nature of their teaching and teaching routines” (Gestsdóttir et al., 2021, p. 47), Hartzler-Miller (2001) points to a certain paradox of a double epistemic standard where a teacher may take the position of perceiving history as an interpretative science, but presents history as a single narrative. In the context of the implementation of their teaching, VanSledright (1996) further notes that teachers are not capable of an ontological switch, i.e. a change in focus from the content of the discipline to a focus on pedagogy. James (2008) adds that the paradigm of positivism is so ingrained that teachers who underwent a year intervention focusing on the interpretative nature of history stated that, “teaching through interpretation only complicates their efforts to tell, retell, and test one best story.”(p. 192). In his qualitative study, Yilmaz (2008) underlines this by finding that practicing teachers

consider historical knowledge to be an educational outcome, without taking into account the process of acquiring it.

## 5 CONCLUSION

VanSledright (1996) states that the central curricular issue in history education is the balance between content knowledge and procedural skills.<sup>11</sup> Knowledge, of course, is an essential part of history education, but recalling information is not in itself considered historical thinking (Smith, 2017).

Pupils should be taught critical thinking, creating research questions, hypothesis, arguments, assessing the reliability of sources, their usefulness and representativeness, learning to construct and deconstruct historical narratives perceiving that they are not direct copies of the past but interpretations, and should learn to evaluate the validity of these interpretations on the basis of established criteria (Monte-Sano, 2011; Seixas & Morton, 2013; VanSledright, 2011; Voet & De Wever, 2017; Wissinger & De la Paz, 2015). Wansink et al. (2017) conclude that historical knowledge should not be presented as a factual or purely subjective matter, but rather as an open narrative based on evidence that can be questioned and reflected.

---

<sup>11</sup> See difference between first-order concepts (also substantive concepts – historical fact, e.g., plague epidemics) and second-order concepts (also second-order procedural understandings – e.g., evidence of argumentation) - Lee & Ashby, 2000.

## References

- Beneš, Z. (2011). Co je (dnes) didaktika dějepisu? *Pedagogická orientace*, 21(2), 193–206.
- Bohan, Ch. H., & Davis, O. L. (1998). Historical Constructions: How Social Studies Student Teachers' Historical Thinking is Reflected in Their Writing of History. *Theory & Research in Social Education*, 26(2), 173–197.
- Fogo, B. (2014). Core Practices for Teaching History: The Results of a Delphi Panel Survey. *Theory & Research in Social Education*, 42(2), 151–196.
- Freedman, E. B. (2015). “What Happened Needs to Be Told”: Fostering Critical Historical Reasoning in the Classroom. *Cognition and Instruction*, 33(4), 357–398.
- Gaddis, J. L. (2002). *The landscape of history: How historians map the past*. Oxford.
- Gestsdóttir, S.M., Van Drie, J. and Van Boxtel, C. (2021) ‘Teaching historical thinking and reasoning: Teacher beliefs’. *History Education Research Journal*, 18(1), 46–63.
- Goldman, S. R., Britt, M. A., Brown, W., Cribb, G., George, M., Greenleaf, C., . . . Project READI (2016). Disciplinary literacies and learning to read for understanding: A conceptual framework for disciplinary literacy. *Educational Psychologist*, 51, 219–246.
- Hartzler-Miller, C. (2001). Making Sense of “Best Practice” in Teaching History. *Theory & Research in Social Education*, 29(4), 672–695.
- James, J. H. (2008). Teachers as Protectors: Making Sense of Preservice Teachers' Resistance to Interpretation in Elementary History Teaching. *Theory & Research in Social Education*, 36(3), 172–205.
- Lee, P. & Ashby, R. (2000). Progression in historical understanding among students ages 7-14. In P. N. Stearns, P. Seixas, & S. Wineburg (Eds.), *Knowing, teaching and learning history: National and international perspectives* (pp. 199–222). New York University Press.
- Lee, P. & Shemilt, D. (2003). A scaffold not a cage: Progression and progression models in history. *Teaching History*, 113, 13–24.
- Macintyre, S. & Clark, A. (2004). *The History Wars*. Melbourne University Press.
- McCrum, E. (2013) ‘History teachers’ thinking about the nature of their subject’. *Teaching and Teacher Education*, 35(1), 73–80.
- Monte-Sano, C. (2011). Beyond reading comprehension and summary: Learning to read and write in history by focussing on evidence, perspective and interpretation. *Curriculum Inquiry*, 41(2), 212–249.
- Muis, K. R., Bendixen, L. D., & Haerle, F. C. (2006). Domain-general and domain-specificity in personal epistemology research: Philosophical and empirical reflections in the development of a theoretical framework. *Educational Psychology Review*, 18, 3–54.
- Pashler, H., Bain, P., Bottge, B., Graesser, A., Koedinger, K., McDaniel, M., & Metcalfe, J. (2007). *Organizing Instruction and Study to Improve Student Learning* (NCER 2007–2004). National Center for Education Research, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ncer.ed.gov>.
- Reisman, A., Brimsek, E., & Hollywood, C. (2019). Assessment of Historical Analysis and Argumentation (AHAA): A New Measure of Document-Based Historical Thinking. *Cognition and Instruction*, 37(4), 534–561.
- Seixas, D. P., & Morton, T. (2013). *The big six historical thinking concepts*. Nelson College Indigenious.
- Sheldon, S. (2012). Politicians and History: The National Curriculum, National Identity and the Revival of the National Narrative. *History*, 97(326), 256–271.
- Smith, M. D. (2017). Cognitive validity: Can multiple choice items tap historical thinking processes? *American Educational Research Journal*, 54(6), 1256–1287.
- Stoel, G., Logtenberg, A., Wansink, B., Huijgen, T., van Boxtel, C., & van Drie, J. (2017). Measuring epistemological beliefs in history education: An exploration of naïve and nuanced beliefs. *International Journal of Educational Research*, 83, 120–134.
- Štech, S. (2013). Když je kurikulární reforma evidence-less. *Pedagogická orientace*, 23(5), 615–633.
- VanSledright, B. A. (1996). Studying colonization in the eighth grade: What can it teach us about the learning context of current reforms? *Theory and Research in Social Education*, 24, 107–145.
- VanSledright, B. A. (2002). *In search of America's past: Learning to read history in elementary school*. Teachers College Press.
- VanSledright, B. A. (2011). *The challenge of rethinking history education: On practices, theories, and policy*. Routledge.
- VanSledright, B., & Maggioni, L. (2016). Epistemic cognition in history. In J. A. Greene, W. A. Sandoval, & I. Bråten (Eds.), *Handbook of epistemic cognition* (pp. 128–146). Routledge.
- Voet, M. & De Wever, B. (2017). History teachers' knowledge of inquiry methods: An analysis of cognitive processes used during a historical inquiry. *Journal of Teacher Education*, 68(3), 312–329.

- Wansink, B. G. J., Akkerman, S. F., Vermunt, J. D., Haenen, J. P. P., & Wubbels, T. (2017). Epistemological tensions in prospective Dutch history teachers' beliefs about the objectives of secondary education. *Journal of Social Studies Research*, 41(1), 11–24.
- Wils, K., & Verschaffel, T. (2012). Longing for the present in the history of history education. *Paedagogica Historica*, 48(6), 793–799.
- Wilson, S. M., & Wineburg, S. S. (1993). Wrinkles in time and place: Using performance assessments to understand the knowledge of history teachers. *American Educational Research Journal*, 30(4), 729–769.
- Wissinger, D. R., & De La Paz, S. (2015). Effects of critical discussions on middle school students' written historical arguments. *The Journal of Educational Psychology*, 108(1), 43–59.
- Yilmaz, K. (2008). Social Studies Teachers' Conceptions of History: Calling on Historiography. *The Journal of Educational Research*, 101(3), 158–176.
- Zanazanian, P., & Moisan, S. (2012). Harmonizing two of history teaching's main social objectives: Franco-Québécois history teachers and their predispositions to catering to narrative diversity. *Education Sciences*, 2, 255–275.

### Acknowledgement

This contribution was made with a support from an internal grant UJEP-SGS-2020-43-007-3.

### Contact details:

Mgr. Jaroslav Říčan, Ph.D.  
Department of education and applied disciplines  
Faculty of Education  
University Jan Evangelista Purkyně in Ústí nad Labem  
Hoření 13  
400 96 Ústí nad Labem, CZECH REPUBLIC  
Email: jaroslav.rican@ujep.cz

---

## DIGITAL TECHNOLOGIES IN THE EDUCATIONAL PRACTICE OF SECURITY ISSUES

---

Miroslava Kovaříková

### Abstract:

The paper presents the evaluation of pilot verification of a module e-learning course on security issues for students of the follow-up master's programme. The paper brings information on the structure and contents of the course, as well as experience from the first year of its implementation. The text brings information on the results of a survey conducted among students who completed the course. The conclusion summarizes the results of the survey and their use for updating the course.

### Key words:

e-learning, security issues, evaluation of importance of the course, evaluation of difficulty of the course, evaluation of interest in the course.

## 1 INTRODUCTION

Inclusion of security issues to university education of teachers at the Faculty of Education of the Charles University takes place on the basis of implementation of the Government Decree No. 734, document "Incorporation of the topics Protection of people in extraordinary events, health care and road safety education to study programmes of faculties of education", although the current wording of the above decree is not binding in terms of implementation. The module e-learning course "Training before teaching practice" was launched at the Faculty of Education of the Charles University in winter semester of the academic year 2018/2019 (Note: hereinafter referred to as the course).

## 2 STARTING POINTS

In the academic year 2017/2018, the preparation of a course on security issues focused on common risks and extraordinary situations at school for undergraduate students of the Faculty of Education of the Charles University was launched. It was necessary to create the contents of the course, as well as prepare study texts for individual modules of the e-learning course. The preparation of the course was based on the recommendations of the European Agency for Safety and Health at Work (Fein, 2002; Olweus & Limber, 2000). The publication "Occupational safety and health and education: a whole-school approach" (Bruck, 2013; Smith, 2003) lists recommendations for successful inclusion of security issues to teachers' undergraduate training (Kovářková, 2016). The following recommendations were used to create the course".

1. Security education must be limited to key aspects using actual cases, problem-solving methods and active learning.
2. To incorporate the issue, use existing courses as updates of current subjects, in particular in common pedagogical preparation.
3. Make use of the possibilities of e-learning courses which offer students the option of individual fulfilment.
4. Cooperate with the Integrated Rescue System during the course preparation and implementation.
5. Cooperate with other universities engaged in teacher preparation and share materials on security issues (Kovářková, 2015).

As for the first point of the recommendation concerning the definition of key aspects of the issue, topics were defined based on discussion of selected academic staff with members of the inter-sector expert working group for security topics. (Osher, Dwyer, & Jackson, 2004; O'Toole, 2000; Spaaij, 2010; Sprague & Walker, 2002). The following topics were determined:

- Common risks at school (injuries, first aid)
- Traffic safety
- Emergency situations (fire protection)
- Amok, armed attacker in school
- Selected school safety legislation
- Information security

As for the second point of the recommendation, on the use of existing courses, the courses Continuous Professional Practice at Primary School and Continuous Professional Practice at Secondary School were used for implementation. The course was presented as an update of the current texts for students in Moodle and was redesigned to e-learning structure, not as an introduction of a new course. (see recommendation no. 3). The course is completed with a certificate which the student prints themselves on the basis of an immediately automatically evaluated control test.

The test includes control questions from all modules. Printed certificates are added to students' portfolios from professional practice. In creating the contents of the e-learning, we cooperated with professionals from the respective units of the Integrated Rescue System, particularly for the purpose of reviewing individual parts. (see recommendation no. 4) The course has currently been adopted and used by the Hussite Theological Faculty in Prague and negotiations with other institutions are underway. (see recommendation no. 5)

The course was opened to students in the academic year 2018/19. Students were trained before entering continuous professional practice.

## 3 METHODOLOGY

Data were collected electronically during May and June 2019. Individual modules of the course were anonymously evaluated by respondents in terms of selected criteria. The questionnaire included both closed and open-ended questions. Questions were focused on subjective evaluation and reflection of the course. This included the fulfilment of participants' expectations, usefulness and practical applicability of individual topics. We also learned about satisfaction with organization of education, methods used and professional level of education. Open-ended questions allowed to pass any recommendations for implementation. It was also examined how individual participants perceive tangible benefits of education for their work. We received a total of 148 questionnaires. The questionnaire measured 21 parameters evaluated by respondents on a 1 to 10 scale.



## 4 OBJECTIVES OF THE SURVEY

To learn the evaluation of the new course in terms of its importance for actual teaching practice, evaluation of difficulty of individual topics in study and evaluation of interest in individual topics.

To use the data obtained to modify the course and learning curriculum of security issues and used educational methods, as well as for final text editing and creating methodology of security issues.

### Hypotheses:

1. Respondents from practice (students of combined studies) generally evaluate the importance of the course and its benefits for practice at school as more important.
2. Respondents from practice (students of combined studies) generally evaluate the importance of individual parts of the course as more important.
3. Respondents from practice (students of combined studies) generally evaluate the benefits of the course for practice at school as more important.
4. Number of years of experience affects the evaluation of total importance of the course.
5. Number of years of experience affects the evaluation of importance of individual parts of the course.
6. Number of years of experience affects the evaluation of benefits of the course for practice at school.
7. Among women, the total importance of the course was generally evaluated as more important.
8. Among women, the total importance of individual parts of the course was generally evaluated as more important.

## 5 METHODS

Descriptive statistics and nonparametric statistical methods were used for the analysis. *Mann – Whitney test, Spearman's Rank correlation coefficient and Somers' D coefficient.* (Hebák, 2013). Data were tested to meet the assumption of normal distribution which was rejected based on the Shapiro-Wilk test. Since the data from

the questionnaire are also ordinal, nonparametric statistical methods were used for further analyses.

*Mann – Whitney test for two independent samples*, the test compares medians, or the whole distribution of variables, and tests their conformity. As it is based on ordering of all measured values in ascending order of their size, it can also be used for ordinal variables. The test criterion U is the number of all cases in which the values of one selection precede the values of the other. The hypothesis can be verified by comparing the resulting P-value with the significance level, usually chosen as  $\alpha = 5\%$ . If the P-value is greater than 0.05, we cannot reject the tested hypothesis of the same level in the groups. On the contrary, it can be rejected at a value lower than 0.05 which proves dependence of the level on the factor observed (Pecáková, 2011).

### *Spearman's Rank correlation coefficient*

The Spearman's coefficient measures the intensity of dependence of the order of the characters of the variable observed. It is used to measure the association of two ordinal variables for which nonparametric testing is required. It takes values between  $-1$ ;  $1$ ; extreme values denote absolute dependence, the sign indicates the direction: plus for direct, minus for indirect dependence. Lower values mean weak or moderate dependence. The statistical significance of this coefficient is verified using the test and its respective P-value. If it is lower than the selected significance level, often 0.05, the dependence measured by the coefficient is considered statistically significant. The strength of the correlation is determined by the value of this coefficient (Hebák, 2013).

### *Somers' D coefficient*

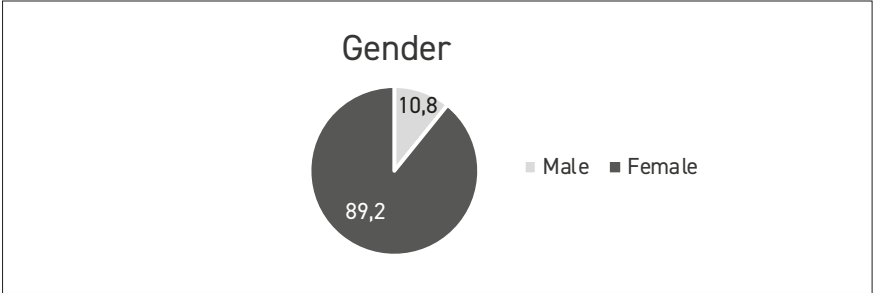
The Somers' coefficient measures the relationship between two ordinal variables. Its asymmetric variant can also take into account the direction of dependence. The extreme values from  $-1$ ;  $1$  indicate the strength of the association. The statistical significance of this coefficient can also be observed using the test and its respective P-value (Hebák, 2013).

### Evaluation, descriptive statistics

The sample of respondents consists of one tenth of men, the rest being women.



Graph 1: Gender of respondents



Source: Own

Further identification data observed included type of studies. More than half of respondents has fulltime studies, others study in combined studies. Only two respondents specified both types of study. In the introductory part of the questionnaire, respondents were asked whether they perceive the course as beneficial for teaching practice. According to 83.8% of respondents, the course is beneficial for teaching practice. Average time spent by studying the course was 4 hours, the middle median value of the coordinated set is 2 hours. The time ranges from 0 to 80 hours (Kovaříková, 2018).

Evaluation of importance of the course:

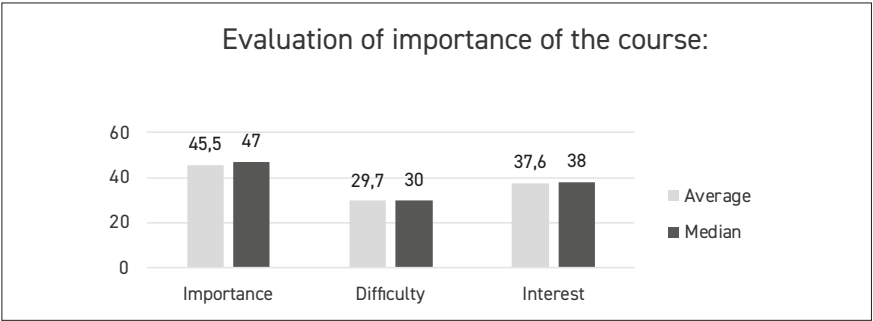
The course was further evaluated in terms of importance for teaching practice, difficulty and interest in its contents. These three parameters were chosen as the key factors for students' motivation to study the course. (for more details, see for example Hrabal & Pavelková, 2010; Carrasco, 2011). Average evaluation of the course importance was 45.5, with 29.7 for difficulty and 37.6 for interest. The middle median value of the coordinated set was 47 for importance, 30 for difficulty and 38 for interest. The most common modal value is for importance and 30 for both difficulty and interest. The ratings always range from 6 to 60.

Tab. 1: Evaluation of importance of the course

	Importance	Difficulty	Interest
Average	45,5	29,7	37,6
Middle median	47	30	38
Modus	60	30	30
Standard deviation	11,277	12,228	12,687
Minimum	6	6	6
Maximum	60	60	60

Source: Own

Graph 2: Evaluation of importance of the course

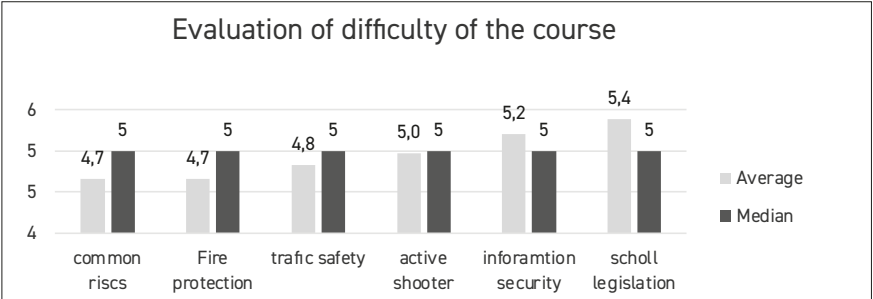


Source: Own

Evaluation of difficulty of the course

The highest average evaluation of difficulty of the course is 5.4 for school legislation, 5.2 for information security and 5.0 for active shooter.

Graf 3: Evaluation of difficulty of the course

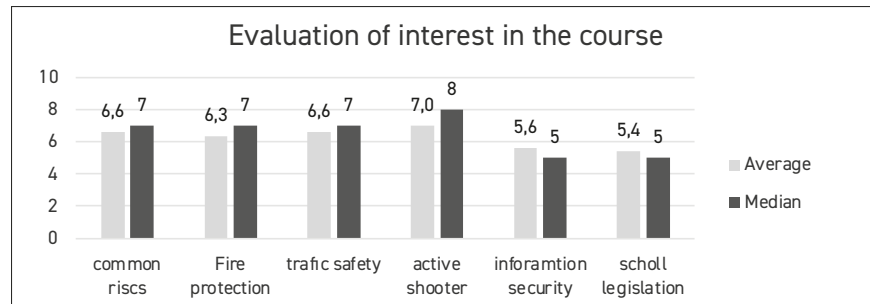


Source: Own

## Evaluation of interest in the course

The highest average evaluation of interest in the course is 7.0 for active shooter, followed by 6.6 for traffic safety and 6.6 for common risks at school.

**Graf 4: Evaluation of interest in the course**



Source: Own

## Testing of hypotheses

*Hypothesis 1:* Respondents from practice (students of combined studies) generally evaluate the total importance of the course as more important

According to both average and median values of total evaluation of importance, students of full-time studies indicate higher importance. According to the Mann-Whitney test, however, the difference is not statistically significant as the resulting P-value is higher than 0.05. Moreover, even according to Somers' D, there was no statistically significant dependence of importance evaluation on the type of studies.

The hypothesis that respondents from practice (students of combined studies) generally evaluate the total importance of the course as more important was therefore not proven.

**Tab. 2: Total importance**

		Total importance	
		Average	Median
Types of study	Full time	46,4	49
	Combined	45,0	46
	total	45,5	47

**Tab. 3: Test Statistics**

	Importance
Mann-Whitney U	2230,000
Wilcoxon W	4121,000
Z	-1,440
Asymp. Sig. (2-tailed)	,150
a. Grouping Variable: study	

Source: Own

**Tab. 4: Directional measures**

			Value	Asymptotic Standard Error <sup>a</sup>	Approximate T <sup>b</sup>	Approximate Significance
Ordinal	by	importance	-,140	,095	-1,475	,140
Ordinal	Somers' d	Dependent				
a. Not assuming the null hypothesis.						
b. Using the asymptotic standard error assuming the null hypothesis.						

Source: Own

*Hypothesis 2:* Respondents from practice (students of combined studies) generally evaluate the importance of individual parts of the course as more important

According to both average and median values of evaluation of importance, students of full-time studies indicate similar evaluation of importance as students of combined studies in all parts of the course apart from "Information security, GDPR", where students of combined studies indicate much lower importance. In this part only the difference according to the Mann-Whitney test was statistically significant as the resulting P-value is lower than 0.05. Also, according to Somers' D, in this part only there was a statistically significant dependence of importance evaluation

on the type of studies with students of combined studies usually indicating lower evaluation of importance. However, according to the coefficient value of 0.325, this dependence is very weak.

The hypothesis that respondents from practice (students of combined studies) generally evaluate the importance of individual parts of the course as more important was therefore proven only for the “Information security, GDPR” part.

*Hypothesis 3:* Respondents from practice (students of combined studies) generally evaluate the benefits of the course for practice at school as more important.

According to average values of evaluation of the course benefits, students of combined studies usually indicate somewhat higher importance (in 90% of cases). According to the Mann-Whitney test, however, the difference is not statistically significant as the resulting P-value is higher than 0.05. Moreover, even according to Somers’ D, there was no statistically significant dependence of benefit evaluation on the type of studies.

The hypothesis that respondents from practice (students of combined studies) generally evaluate the benefits of the course for practice at school as more important was there not proven.

## 6 CONCLUSION

The results of the questionnaire survey showed that students evaluate the course on security issues as important for practice and interesting. Since the course is perceived as not difficult, it can be assumed that the chosen form of e-learning course enabled all students to complete the course with an average duration of four hours. In the short period of one year, this form allowed to provide basic training in security issues to a total of 89% of all students of the follow-up master’s studies. A total of 22% of all trained students provided feedback.

The first year of the course showed the necessity of further updating existing topics of the course and adding more module units to the course. A new module focusing

on pupils' trips abroad, overnight events, safety during specific activities and other extraordinary situations is currently planned.

It is pleasant that the Faculty of Education of the Charles University takes security issues for teachers as integral part of undergraduate training and the proposed new accreditation includes these issues in direct teaching of common basis.

## References

- Bruck, K. (2013). *Occupational safety and health and education: a whole-school approach*. Bilbao: EU-OSHA.
- Carrasco, J. B. (2011). *Didáctica básica para profesores*. Madrid: Síntesis. EU-OSHA – The European Agency for Safety and Health at Work (2009), *OSH in the school curriculum – Member States activities*. Bilbao: Facts 82, Luxemburg.
- Fein, R. A. (2002). *Threat assessment in schools: a guide to managing threatening situations and to creating safe school climates*. Washington, D.C.: U. S. Dept. of Education.
- Hebák, P. et al. (2013). *Statistické myšlení a nástroje analýzy dat*. Praha: Informatorium.
- Hrabal, V., & Pavelková, I. (2010). *Jaký jsem učitel*. Praha: Portál.
- Jimerson, S. R., Swearer, S., & Espelage, D. L. (2010). *Handbook of bullying in schools: an international perspective*. New York: Routledge.
- Kovaříková, M. (2018). *Evropské tendence ve vzdělávání v oblasti podpory zdraví a bezpečnosti*. Život ve zdraví 2018. Brno: Masarykova univerzita.
- Kovaříková, M. (2016). Prevention of Armed Assaults at schools and Universities in the Czech Republic. *International Advances in Economic Research*, 22 (3).
- Kovaříková, M. (2015). Prevence ozbrojených útoků na školách jako součást didaktiky mimořádných situací. *Lifelong Learning – celoživotní vzdělávání*, 5(3), 95–112.
- Osher, D., Dwyer, K., & Jackson, S. (2004). *Safe, supportive and successful schools: Step by Step*. American Institutes for Research.
- O'Toole, M. E. (2000). *The School Shooter: a Threat Assessment Perspective*. Quantico, Va: FBI Academy.
- Olweus, D., & Limber, S. (2010). Bullying in School: Evaluation and Dissemination of the Olweus Bullying Prevention Program. *American Journal of Orthopsychiatry*, 80(1), 124–34.
- Pecáková, I. (2011). *Statistika v terénních průzkumech*. Praha: Professional Publishing.

Smith, P., K. (2003) *Violence in schools: the response in Europe*. London: Routledge Falmer.

Spaaij, R. (2010). The Enigma of Lone Wolf Terrorism: An Assessment. *Studies in Conflict & Terrorism*, 33(9), 854–870.

Sprague, J., & Walker, H. (2002) *Creating school wide prevention and intervention strategies*. Dostupné z <https://www.ncjrs.gov/pdffiles1/ojjdp/book1.pdf>.

## Contact details:

PhDr. Miroslava Kovaříková, Ph.D.  
Masaryk Institute of Advanced Studies  
Czech Technical University in Prague  
Kolejní 2637/2a  
160 00 Praha 6, CZECH REPUBLIC  
E-mail: [miroslava.kovarikova@cvut.cz](mailto:miroslava.kovarikova@cvut.cz)

---

# DESCRIPTION AND ANALYSIS OF STUDENTS' OPINIONS OF THE ETHICS OF A MILITARY PROFESSIONAL

---

Miroslav Krč, Lubomír Kubínyi, Lucie Říhová

## Abstract:

The paper summarizes the results of a survey of opinions of the military professional' values in students of the 1st to 5th year of military studies at the University of Defence during their preparation for the profession of a military professional. The research group consisted of 20 students from each year of study, a total of 100 students. Opinions of the values of military ethics (a total of 19) were surveyed using a numerical scale. The formulated hypothesis was as follows: The study and stay in the military environment strengthen a desired value orientation of a military professional in the intentions of the Code of Ethics of the military professional of the Army of the Czech Republic.

## Key words:

Ethics, ethical values, morality, education, military professional, University of Defence.

## 1 INTRODUCTION

The current social and economic development in the world experiences a difficult period. The new quality of mutual relations among countries is being formed, value systems are changing in connection with fundamental changes in their social composition and domestic political and international orientation on a long-term basis. New values make their way to the life with problems since their putting into practice is accompanied with difficulties of an objective and subjective nature. The process of searching and at the same time consolidating values is currently underway. In the conditions of the Armed Forces of the Czech Republic, commanders and chiefs pay attention to morality and ethics.

They expect morality and ethics to change the way individuals think and act. In this paper, we use the ethics category, the content of which is the examination of the moral dimension of a military professional. We proceed from the assumption that ethics is a discipline of practical philosophy. Therefore, we examined students' attitudes to the values that guide their actions in situations when there is a free choice through free will among various values. Moral behaviour is to a great extent the result of the free decision of the individual even in the conditions of the armed forces. Future officers swear to be forthright, honest, demanding, etc. They promise to follow the rules, whether they like it or not, they will agree with them.

Ethical values are standards, according to which a person should act on the basis of values. Aristotle compiles a scheme of four basic ancient virtues: wisdom, sobriety, bravery, justice. Understanding of justice is linked to the fact that justice is not given to anyone personally, but can only characterize society as a whole, as a system (Aristotle, 2021). The stated values are the basis of the values of a military professional. Values are fundamental beliefs, such as duty, honour, and integrity, that motivate attitudes and actions. Not all the values are ethical values (integrity is, happiness is not). Ethical values relate to what is right and what is wrong; and, therefore, they take precedence over unethical values when making ethical decisions. Values are concepts that are important to us as for ideas, behaviours and actions. The values of a military professional are things that are worth fighting for and things to sacrifice oneself for. Our values strongly influence our decisions and help determine where we place emphasis on our personal and professional lives. Values form the basis of our understanding of ethics.

We have personal values and social values in society. Our personal values are our own values and are shaped by our upbringing, cultural and ethnic background, religious beliefs and personal experience. Whereas personal values are unique to each individual, they are not the right platform, on which to base professional ethics, although they can provide insight into how we recognize, value, and approach ethical behaviour.

In a military organization, ethics is an integral part of the processes of education and training (Personnel Training Concept, 2019). At the theoretical level, the processes of education and training of students-officer candidates are dealt with mainly by authors from the University of Defence (Krč, Kubínyi, Davidová, & Jílek, 2021; Kubínyi & Veteška, 2017), but also by other expert public. Military ethics is

gradually becoming one of the central themes of military organizations, also in terms of the ethical dimensions of military activities (Brown, Trevino, & Harrison, 2005; Hersh, 2021; O'Brien, 2017; Mileham & Willett, 2020; Wrage, 2012; Wrzosek, 2011). Other authors aim at the description of a specific model of teaching military professional ethics that is focused on the transfer of values, the use of case studies to achieve didactic goals of ethical education and evaluation of the possibilities and limits of ethical education for the students (Mikulka & Fedorková, 2019; Mikulka, Nekvapilová, & Fedorková, 2018; Sevruck, Sokolovska, Chuprinova, & Pylypenko, 2021; Thompson & Jetly, 2014; Tudorascu, 2012; van Baarle, E. et al., 2015;).

The current Code of Ethics of the military professional of the Army of the Czech Republic contains the following values:

- Responsibility and a Sense of Duty;
- Selflessness;
- Courage;
- Loyalty; and
- Honour (Soldier's Code of Ethics, 2015).

## 2 RESEARCH METHODOLOGY

In order to better understand the place and role of the military professional's values, an analysis of the opinions of the ethics in the military students of the 1st to 5th year of the Faculty of Military Leadership at the University of Defence has been performed. The intention is to examine how the value orientation of military professionals will develop over the next five years. The formulated hypothesis is as follows: The preparation of students in the military environment strengthens the desired value orientation of a military professional. Preparing students means their education and training. The first data collection was carried out using a questionnaire in November 2021. The compilation of the questionnaire was based on the requirements for general values for the job performance of a soldier. The questionnaire surveyed respondents' attitudes to 22 moral categories. The paper presents the attitudes of respondents to 5 selected categories. Respondents expressed the degree of consent on the Likert scale in values from 1 to 8. The value marked 1 expresses the minimum meaning, the value 8 means the maximum meaning. The surveyed



sample contained a selection of 100 respondents evenly divided into groups of 20 respondents in individual years of study.

The selection of respondents was random. The sample made up about 20 % of the basic set and guaranteed the representativeness of the results for individual groups of respondents. A typical participant in the survey was an officer candidate, a student aged 20 to 25. In this article, we are concerned with finding the differences between beginning students (1st and 2nd year of study) and students in higher years (3rd to 5th year of study) in the evaluation of the moral values of a military professional. The results of the research show that the evaluation of respondents regarding the moral values of a military professional from the 1st to the 5th year of study has an increasing tendency. In the students of the 1st year of study, the overall score reaches 2,783 points, and in the students of the 5th year of study it is 2,980 points.

The authors present only the partial results of extensive research. At present, research on moral values in military professionals in Poland, Hungary, Slovakia, Romania, Belgium, Finland and Austria is still ongoing.

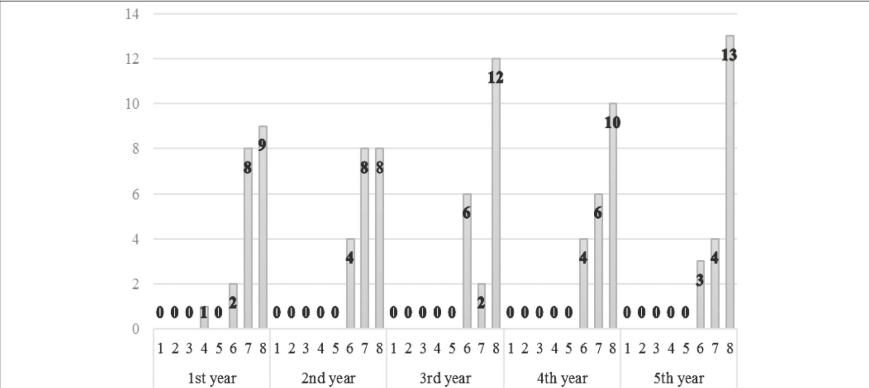
3 SELECTED RESULTS/ DISCUSSION

Due to the sensitivity of the data in the paper, we present only the values stated in the Code of Ethics of the Professional of the Army of the Czech Republic.

Responsibility and a Sense of Duty

The value of Responsibility and a Sense of Duty is defined as "be aware of your responsibilities, show initiative and creative approach to the service" (Soldier's Code of Ethics, 2015).. On the basis of the statements of the respondents, it is possible to state the differences between the students of lower and higher years of study, namely in the distribution of evaluations as the most significant. The respondents of the 3rd year of study marked the stated value as the most significant 12 times in total, the respondents of the 4th year of study 10 times in total and the respondents of the 5th year of study 13 times in total.

Graph 1: Responsibility and a Sense of Duty

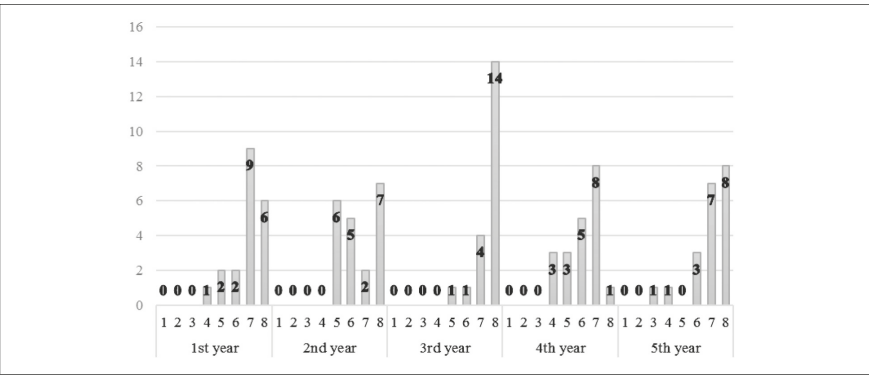


Source: Authors' own elaboration

Selflessness

Selflessness - "give everything, give more than you get, realize that the success of the whole is higher than the success of the individual" (Soldier's Code of Ethics, 2015). This value is important mainly due to the fact that military activity is predominantly group in nature and is dependent on the performance of each team member and can take place in danger to health and life. Respondents indicate the stated values as significant in all years of study. With the exception of the students' answers of the 5th year of study, the answers are distributed in values from 4 to 8 on a numerical scale.

Graph 2: Selflessness

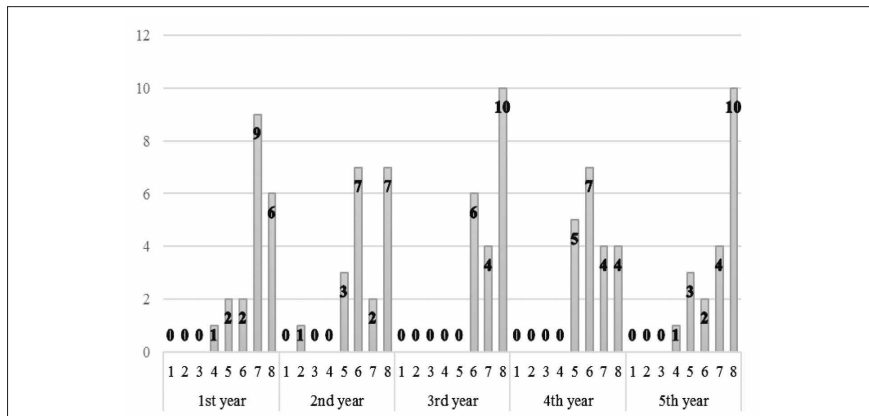


Source: Authors' own elaboration

## Courage

Courage – "do not be afraid to decide and accept new challenges, have the strength to overcome complex, dangerous and risky situations" (Soldier's Code of Ethics, 2015). The Personnel Training Concept (2019) states that one of the goals of educational activities in higher education is to form and require courageous behaviour. Therefore, it is significant that the students of the 3rd and 5th year of study had a total of 10 answers with the highest rating. They are aware of the importance of this value for the service of a professional soldier.

Graph 3: Courage

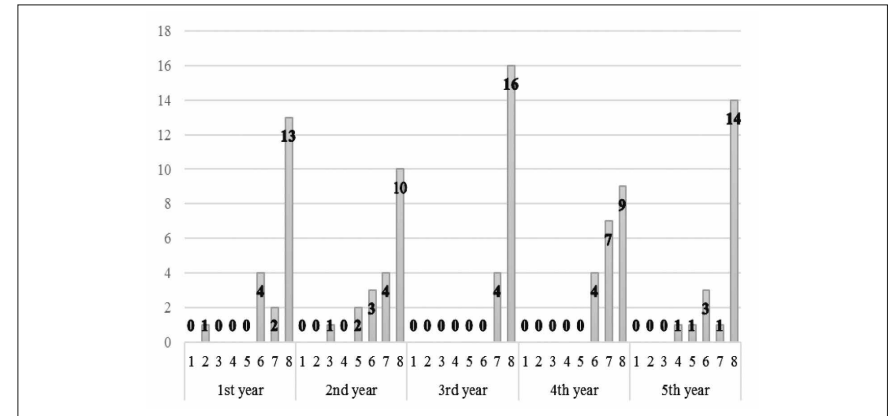


Source: Authors' own elaboration

## Loyalty

Loyalty – "be devoted to your country and its army and loyal to your superiors, respect your co-workers" (Soldier's Code of Ethics, 2015). One of the goals of educational activities in the department is to achieve identification with the interests and needs of the Czech Republic in the field of defence and security (Personnel Training Concept, 2019). It is interesting that a total of 13 students of the 1st year of study marked this value with the highest rating. The highest value of 8 on the numerical scale was marked by 16 students of the 3rd year of study and 14 students of the final year of study.

Graph 4: Loyalty

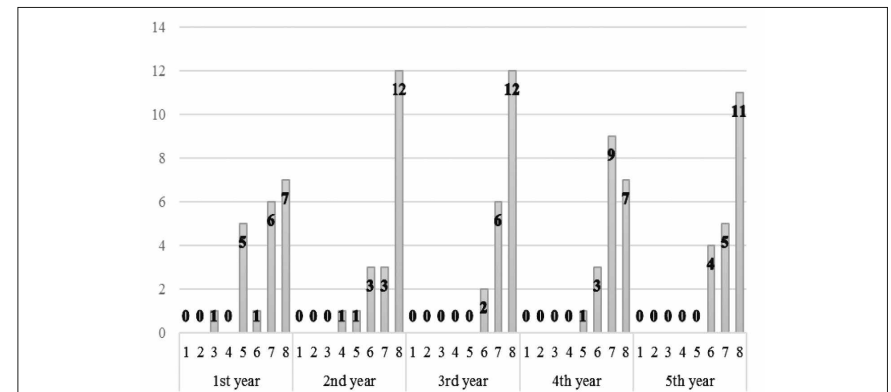


Source: Authors' own elaboration

## Honour

Honour – "be upstanding and principled, always act in accordance with your conscience, your mission binds you" (Soldier's Code of Ethics, 2015). The highest score was selected by the respondents of the 2nd and the 3rd year of study. As for the respondents of the highest year of study, a total of 4 respondents marked it with a value of 6, a total of 5 respondents with a value of 7; and a total of 11 respondents selected the value as the most significant.

Graph 5: Honour



Source: Authors' own elaboration

## 4 CONCLUSION

The army can be perceived not only as an institution, the main task of which is to ensure the defence and security of the state, but also as a social system. In many respects, however, the military profession differs from activities in other professions. It is logical to assume a higher value awareness and a higher level of professional morale in military professionals (Křivánek, 1999). They decided to pursue the military profession voluntarily on the basis of awareness of their moral obligations.

Only in combat/war conditions, situations arise when it is possible to solve problems in terms of civil morality or military morality, closed for the outside world. These are actions and processes that are evaluated differently from the above-mentioned points of view. However, even in peacetime, one can trace a tendency to or departure from the generally accepted ethical and moral values in a military professional. In democratic states, the principles of military morality are based on social morality.

The influence of the military environment and the system of military education are manifested in the fact that the importance of moral values for the military professional has an increasing tendency. If, at the beginning of the study in the military environment, the importance of 19 moral values for a military professional is 100 points, then, at the end of the study, it is 120 points. The formulated hypothesis was confirmed by a questionnaire survey. The values stated in the Code of Ethics of a Professional of the Army of the Czech Republic have the highest evaluation in the students of the last year of study, as follows from the above-mentioned graphs. This, as a consequence, confirms the importance of the military educational system in the training of a military professional.

## References

- Aristoteles (2021). *Etika Níkomachova*. Páté nezměněné vydání. Praha: Rezek.
- Brown, M., E., Trevino, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational behavior and human decision processes*, Vol. 97, No. 2. pp. 117-134. <https://doi.org/10.1016/j.obhdp.2005.03.002>.
- Hersh, M. A. (2021). Professional ethics and social responsibility: military work and peacebuilding. *European Journal of Psychotraumatology*, Vol. 5, No. 1. <https://doi.org/10.1007/s00146-021-01238-5>.
- Kodex etiky vojáka*. (2015). Available from: <https://www.kaplani.army.cz/etika>.
- Koncepce přípravy personálu rezortu pro potřeby rezortu Ministerstva obrany*. (2019). Praha: Ministerstvo obrany ČR.
- Krč, M., Kubínyi, L., Davidová, M., & Jílek, L. (2021). Distance Education of Officers-Candidates at the Time of Anti-COVID Measures. In *Adult Education 2020 - Reflection, Reality and Potential of the Virtual World: Proceedings of the 10th International Adult Education Conference (IAEC 2020)*. Prague, Czech Republic, pp. 74-79.
- Kubínyi, L., & Veteška, J. (2017). Motivace a bariéry v dalším profesním vzdělávání vojáků. In *Adult Education 2016. Meeting 6th International Adult Education Conference (IAEC)*. Prague, Czech Republic, pp. 283-291. WOS: 000417240300023.
- Křivánek, A. (1999). *Obecná, sociální a profesní etika*. Brno: Vojenská akademie.
- Mikulka, Z., & Fedorková, J. (2019). Possibilities and limits of ethics education for students at the university of defence - future military leaders of the army of the Czech Republic. In *13th international technology, education and development conference*. Valencia, Spain, pp. 9422-9428. WOS:000541042204072.
- Mikulka, Z., Nekvapilová, I., & Fedorková, J. (2018). Teaching professional ethics in the system of military tertiary education with the use of adventure education. In *11th Annual International Conference of Education, Research and Innovation*. Seville, Spain, pp. 2357-2366. WOS:000562759302066.
- Mileham, P., & Willett, L. (2020). Military ethics-A force for good. *World today*, Vol. 56, No. 2, pp. 22-24. WOS: 000085306300008.

O'Brien, R. (2017). Military ethics and responsible leadership: the enduring contribution of Guillaume-Henri Dufour. In *Conference of the Australian-Association-of-Applied-and-Professional-Ethics*. Adelaide, Australia, pp. 37-48. <https://doi.org/10.1108/S1529-209620170000017006>.

Sevruk, I., Sokolovska, Y., Chuprinova, N., & Pylypenko, V. (2021). Ethical Education of the Military: NATO Experience and Ukrainian Practice. *Revista Romaneasca Pentru Educatie Multidimensionala*, Vol. 13, No. 1, pp. 324-348. <https://doi.org/10.18662/rrem/13.1/375>.

Thompson, MM., & Jetly, R. (2014). Battlefield ethics training: integrating ethical scenarios in high-intensity military field exercises. *European Journal of Psychotraumatology*, Vol. 5, No. 1. <https://doi.org/10.3402/ejpt.v5.23668>.

Tudorascu, MM. (2012). Professional ethics of the military. In *18th International conference - the knowledge-based organization: economic, social and administrative approaches to the knowledge-based organization*. Sibiu, Romania, pp. 550-554. WOS:000393448200091.

van Baarle, E., Bosch, J., Widdershoven, G., Verweij, D., & Molejwik, B. (2015). Moral dilemmas in a military context. A case study of a train the trainer course on military ethics. *Journal of Moral Education*, Vol. 44, No. 4, pp. 458-479. <https://doi.org/10.1080/03057240.2015.1087389>

Wrage, S. (2012). Teaching Ethics at a Military Academy, *International Studies Perspectives*, Vol. 13, No. 1, pp. 21-25. <https://doi.org/10.1111/j.1528-3585.2011.00452.x>.

Wrzosek, M. (2011). Modern technologies in education process of military students (national defence university experience). In *Meeting International Conference on Distance Learning, Simulation and Communication*. Brno, Czech Republic, pp. 258-265. WOS:000359950800040.

## Acknowledgements

The paper was developed as part of the solution of a long-term strategy of the organization development Applied Economics in the Field of Defence.

## Contact details:

prof. PhDr. Miroslav Krč, CSc.  
Department of Resources Management  
Faculty of Military Leadership  
University of Defence  
Kounicova 65  
662 10 Brno, CZECH REPUBLIC  
E-mail: miroslav.krc@unob.cz

PhDr. Lubomír Kubínyi, Ph.D.  
Department of Resources Management  
Faculty of Military Leadership  
University of Defence  
Kounicova 65  
662 10 Brno, CZECH REPUBLIC  
E-mail: lubomir.kubinyi@unob.cz

Ing. Lucie Říhová  
Department of Military Science Theory  
Faculty of Military Leadership  
University of Defence  
Kounicova 65  
662 10 Brno, CZECH REPUBLIC  
E-mail: lucie.rihova@unob.cz

---

# ATTITUDES OF MILITARY PROFESSIONALS TO A SELECTED ELEMENT OF FURTHER PROFESSIONAL TRAINING

---

Lubomír Kubínyi, Monika Davidová, Libor Jílek, Lucie Říhová

## Abstrakt:

The paper describes the issues of professional training of soldiers of the Army of the Czech Republic. It analyses the knowledge gained from foreign research and the research carried out in the conditions of the Czech Republic. It presents the specifics of military professionals' education within the Ministry of Defence. It submits the results of research aimed at identifying the attitudes of soldiers to a selected element of their preparation - independent studies (self-study). The hypothesis that the willingness to devote part of the time to independent study is related to the level of education attained was not confirmed.

## Key words:

Lifelong learning, training of military professionals, self-study, professional soldiers, research.

## 1 INTRODUCTION

Employee training in an organization is a set of targeted, conscious and planned measures and activities that are aimed at the acquisition of knowledge, skills and abilities (capacities for work) and the acquisition of the desired work behaviour of employees of the organization.

It can be stated that the Ministry of Defence deals in detail with the issues of education of professional soldiers within the personnel management system. The process of staff training within the department is based on processes and measures in the field of education and training (White Paper on Defence, 2011). Independent

(individual) training of a soldier is implemented at the beginning and subsequently during the whole career of the soldier. In independent (individual) preparation, emphasis is placed on the will and willingness of a soldier to learn, namely in the form of independent study.

The area of self-study is specific (Spooner et al., 2019). Research focuses on teacher education or student learning conditions (Diacopoulos et al., 2021; Rhoads & Dehaan, 2013; Rutson-Griffiths & Rutson-Griffiths, 2020). In foreign publications, the issues of further professional training of military professionals is addressed by a number of experts who perceive military professional training as a key activity for the training of highly qualified military professionals (Cieslak, 2018; Geng & Dai, 2014; Hristov, 2018; Liu et al., 2017; Karlova, 2021; Sergeeva et al., 2021; Wrzosek, 2011; Zhuravlova et al., 2021).

In the Czech environment, part of professional texts deal with the soldiers' education at the University of Defence (Šuhaj & Flasar, 2010), the importance of further professional education of professional soldiers in relation to career management (Kubínyi & Mitáček, 2017), a description of views and attitudes to commanders' education and development in the Lithuanian and Austrian Armed Forces (Hurbišová & Davidová, 2016). Other publications provided selected data from research focused on identifying soldiers' motives and barriers for participating in professional training (Kubínyi & Veteška, 2017). Saliger, Hodný and Macháčková were concerned with the education of military school students (Saliger, et al. 2018). Other contributions were devoted to the identification of the influence of organizational culture on the field of education (Saliger, 2017) and the description of the importance of competencies in the processes of training military personnel (Kubínyi & Saliger, 2021).

## 2 RESEARCH METHODOLOGY

The research took place between 2016 and 2019 and one of the subgoals was to identify the views and attitudes of respondents to independent learning. Independent study was defined as the activities performed with the use of educational resources, implemented only on the basis of interest and motivation of the learner, which the respondent organizes himself/herself and which is related to expanding knowledge for the duty performance (Průcha & Veteška, 2012). The theoretical basis of the

project was the concepts of lifelong learning and the theory of rational choice. The research was based on the findings of Hendl (2005) that human behaviour can be measured and predicted to some extent. When compiling the questionnaires, the authors were inspired by the concept of the already implemented research survey done by (Rabušicová & Rabušic, 2008).

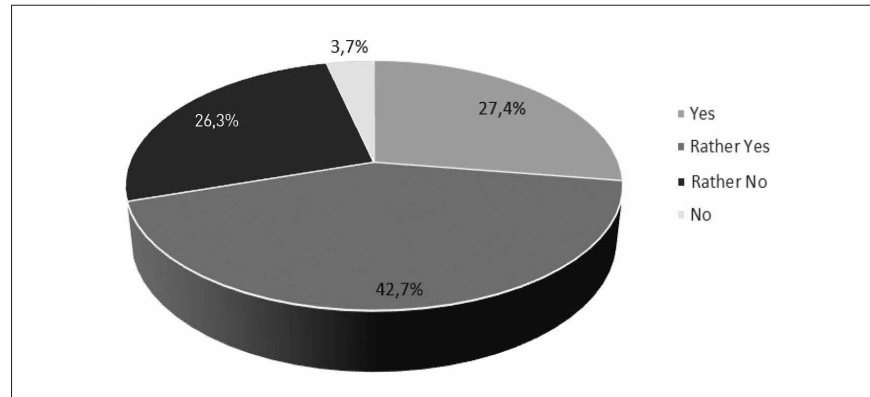
A structured questionnaire was used for data collection, which contained a total of 21 questions and respondents had a choice of several options. The basic group consisted of 23,184 soldiers of the Army of the Czech Republic; the sample consisted of 687 randomly selected professional soldiers. A total of 439 questionnaires were included in the evaluation. The questionnaire contained a total of 3 questions aimed at the area of independent study, which were used to determine the declared willingness of respondents to devote part of their free time to self-study. The data obtained were arranged and compiled into frequency tables and a graph. The chi-square statistical method of good agreement and Spearman's correlation coefficient were used for their evaluation.

## 3 INTERPRETATION OF SELECTED RESULTS/ DISCUSSION

The interpretation of selected results deals with selected findings only. The first area was to find out whether the respondents had expanded their knowledge through self-study in the past twelve months before completing the questionnaire. A total of 438 respondents validly answered this question. An important finding is that a total of 307 (70.1 %) respondents stated that they had expanded their knowledge through independent study in the past twelve months before the survey.



**Graph 1: Expanding knowledge for the duty performance through independent study in the past twelve months.**



Source: Authors' own elaboration

Another question was aimed at finding out what time period during a week the respondents would be willing to devote to independent study. We assumed that a week is a more relevant time period than a period of one month for a qualified time estimate. Respondents had four options to choose from. A total of 420 respondents validly answered the question - they filled in the data on the highest level of education achieved as well as the data on the time range. A total of 114 respondents with university education completed and a total of 10 respondents with advanced vocational training answered.

A total of 232 respondents stated secondary education with a school-leaving examination and a total of 64 respondents stated secondary education with an apprenticeship certificate. A total of 66 respondents are willing to devote 1 hour per week to independent study and a total of 123 respondents are willing to devote 2 hours per week to it. Most respondents, a total of 141, state that they are willing to devote 3 hours per week to independent study. A total of 59 respondents would be willing to study independently for more than 3 hours per week. A total of 31 respondents state that they are not willing to devote themselves to self-study.

**Table 1: Willingness to study independently in relation to levels of previous education**

Frequency		Level of education completed			
		University education	Advanced vocational training	Secondary education with a school-leaving examination	Secondary education with an apprenticeship certificate
Willingness to devote a defined time to independent study per week	1 hour	12	1	35	18
	2 hours	41	4	67	11
	3 hours	40	5	79	17
	More than 3 hours	15	0	33	11
	Unwilling	6	0	18	7

Source: Authors' own elaboration

The chi-square test was used to verify whether the frequencies obtained differ from the theoretical frequencies, and the Spearman's coefficient of rank correlation was to determine how close the relationship between phenomena is (Chráska, 2016). The data for the test of homogeneity across education and the Spearman's correlation coefficient was calculated using the R program for a given level of significance.

The null and alternative hypotheses were formulated.

Hypothesis Ho - Willingness to study independently is not related to the level of education achieved.

The hypothesis was H1 - Willingness to study independently is related to the level of education achieved.

**Table 2: Homogeneity test across education**

Chi2 statistics	p-value
20.1622	0.0641

Source: Authors' own elaboration

Homogeneity cannot be rejected at the 0.05 significance level. This means that across education achieved, there are no significant differences between the time that respondents are willing to devote to their studies (see Table 2).

Table 3: Spearman´s correlation coefficient

Spearman´s correlation coefficient	p-value of the significance test
-0.0027219	0.95565

Source: Authors’ own elaboration

Similarly, the correlation coefficient is not (at the level of significance 0.05) statistically significantly different from zero, there is no relationship between the education attained and the time that respondents are willing to devote to study (see Table 3). This corresponds to the above-mentioned result.

From the viewpoint of the development of the knowledge-based economy, in addition to the degree of participation of adults in further education, the extent to which learners expand their knowledge and skills, especially in qualification-intensive professions, is also important. Průcha (2014) states that self-education processes are a relatively marginal issue in andragogy theory, also due to the fact that distance adult education in particular is based on self-education.

An important determinant of participating in a selected lifelong learning activity, in our case self-study, is the individual's intention, his/her motivation for education and learning. Intention thus links the attitudes and values of the individual and external social pressures, because individuals consider the potential advantages and disadvantages of their actions (Rabušic & Rabušicová, 2008).

The specific system of training the members of the Army of the Czech Republic also corresponds to the nature of duty performance and tasks of the Armed Forces. The system is structured and soldiers are prepared for both performing specific military tasks and for improving their expert knowledge. The training takes place not only within military teams, but also as individual training of individuals. Due to the above, it is not possible to compare the results with previous research, and therefore we will focus only on the discussion of the data published here. The fact that a total of 70.1 % of respondents stated that they had expanded their knowledge

through independent study in the past twelve months can be described as positive. According to Czesaná (2011), professions requiring a high level of qualification are associated with a higher need for self-education, which was confirmed in our survey and in the answers of the respondents. Other research dealing with this area was Employee Education and Training survey, which presents the results of national outputs, describing approaches to the development of company employees. According to the survey mentioned, a tenth of companies supported independent study (Czech Statistical Office, 2017). However, Public Administration and Defence entities were not included in the sample.

4 CONCLUSION

A subgoal of the research was to confirm or disconfirm the hypothesis whether the willingness to study independently is influenced by the level of previous education achieved. The homogeneity test resulted in the conclusion that homogeneity could not be rejected. Similarly, the correlation coefficient was not statistically significant from scratch and, therefore, it can be stated that there is no relationship between the achieved education and the time that respondents are willing to devote to self-study.

In conclusion, it can be stated that the management of the Ministry of Defence supports the education of military professionals. This statement can be substantiated by the fact that the preparation is defined by strategic documents (Personnel Training Concept, 2019), internal regulations in the form of Decrees of the Ministry of Defence and Orders of the Minister of Defence, but also by the scope of educational activities provided.

## References

Bílá kniha o obraně. (2011). Praha. MO ČR-OKP MO.

Cieslak, E. (2018). Understanding People and Technology. Professional Military Education and Challenges of Future Commanders Development. In *Challenges to national defence in contemporary geopolitical situation. Meeting 1st International Scientific Conference and Live Firing Show on Challenges to National Defence in the Contemporary Geopolitical Situation (CNDCGS)*. Vilnius, Lithuania. pp. 134-141. WOS:000461032600020.

Czesaná, V. a kol. (2011). *Konkurenční schopnost České republiky 2010-2011. Kvalita lidských zdrojů*. Praha: NVF.

Diacopoulos, M. M., Gregory, K. H., Branyon, A. & Butler, B. M. (2021). Learning and Living Self-Study Research: Guidelines to the Self-Study Journey. *Studying teacher education*. <https://doi.org/10.1080/17425964.2021.1992859>.

Geng, H. F., & Dai, J. M. (2014). Thinking about Constructive Teaching for Military Professional Education. In *Proceedings of the 2014 international conference on e-education, e-business and information management. Book Series Advances in Intelligent Systems Research*. Shanghai, China. pp. 235-237. WOS:000340830900069.

Hendl, J. (2005). *Kvalitativní výzkum: základní metody a aplikace*. Praha: Portál.

Hristov, N. H. (2018). Military education as possibility in Bulgaria. In *5th International conference on education and social sciences (INTCESS 2018)*. Istanbul, Turkey. pp. 177-182. WOS:000459818500025.

Hurbišová, P., & Davidová, M. (2016). Towards enhanced security: Education and development of military commanders within the Lithuanian and Austrian Armed Forces. *Journal of Security and Sustainability Issues*, Vol. 5, No. 3, pp. 311-322. [http://dx.doi.org/10.9770/jssi.2016.5.3\(1\)](http://dx.doi.org/10.9770/jssi.2016.5.3(1)).

Chráska, M. (2016). *Metody pedagogického výzkumu: základy kvantitativního výzkumu*. Praha: Grada.

Karlova, E. N. (2021). The reproduction of social structure of the Russian Armed Forces in military professional education. *Sotsiologicheskie issledovaniya*, Vol. 2, pp. 81-91. WOS:000649030800008.

*Koncepce přípravy personálu rezortu pro potřeby rezortu Ministerstva obrany*. (2019). Praha: Ministerstvo obrany ČR.

Kubínyi, L., & Mitáček, R. (2017). Professional and career development of military professionals. In: *Adult Education 2016. Meeting 6th International Adult Education Conference (IAEC)*. Prague, Czech Republic. pp. 273-282. WOS:000417240300022.

Kubínyi, L., & Saliger, R. (2021). Learning competencies and possibilities of their development in military professionals. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, Vol. 69, No. 2, pp. 221-230. <https://doi.org/10.11118/actaun.2021.019>.

Kubínyi, L., & Veteška, J. (2017). Motivation and barriers in the further professional education of soldiers. In *6th International Adult Education Conference (IAEC)*. Prague, Czech Republic. pp. 283-291. WOS:000417240300023.

Liu, K., He, Y., & Xu, L.S. (2017) Analysis of Professional Education Military Evaluation System Development for Military Academies. In *Proceedings of the 2017 world conference on management science and human social development*. Bangkok, Thailand. pp. 46-50. WOS:000472044000009.

Průcha, J. (2014). *Andragogický výzkum*. Praha: Grada.

Průcha, J., & Veteška, J. (2012). *Andragogický slovník*. Praha: Grada.

Rabušicová, M., & Rabušic, L. (Eds.). (2008). *Učíme se po celý život?: o vzdělávání dospělých v České republice*. Brno: Masarykova univerzita.

Rhoads, K., & Dehaan, J. (2013). Enhancing Student Self-Study Attitude and Activity with Motivational Techniques. *Studies in self-access learning journal*, Vol. 4, No. 3, pp. 175-195. WOS:000218979100003.

Rutson-Griffiths, Y., & Rutson-Griffiths, A. (2020). The Relationship Between Independent Study Time, Self-Directedness, and Language Gain. *Studies in self-access learning journal*, Vol. 11, No. 1, pp. 24-39. WOS:000546174600002.

Saliger, R. (2017). The findings from research of organizational culture in the Army of the Czech Republic - the basis for innovations in the education of leaders in military school system. In *Adult Education 2016. Meeting 6th International Adult Education Conference*. Prague, Czech Republic. pp. 259-272. WOS:000417240300021.

Saliger, R., Hodný, J., & Macháčková, P. (2018). Determining the capabilities of military university students to regulate the load as a prerequisite for the innovation of their education in the field of load. In *Adult Education 2017. Meeting*

7th International Adult Education Conference. Prague, Czech Republic. pp. 115-129. WOS:000583854200012.

Sergeeva, M. G., Korobov, A. S., Lukin, V. B., Paramonov, E. V., & Zaitsev, A. O. (2021). Digital educational environment as a factor of military professional training of future officers. *Revista tempos e espaços educacao*, Vol. 14, No. 33. <http://dx.doi.org/10.20952/revtee.v14i33.15255>.

Spooner, M. T., Alex, J. E., Greer, J. A., Delorey, D. R., Kiser, R. A., Petersen, C., Polk, T. & Gunzelman, K. (2019). Simulation Training for Operational Medicine Providers (STOMP): Impact of a Comprehensive Skills-Based Curriculum for Military General Medical Officers. *Military medicine*, Vol. 184, No. 5-6, pp. E141-E146. <https://doi.org/10.1093/milmed/usy346>.

Šuhaj, M., & Flasar, Z. (2010). Selected aspects of tertiary education of professionals in the branch of military management. In: *Meeting16th International Conference on the Knowledge-Based Organization – Management and Military Sciences*. Sibiu, Romania. pp. 644-650. WOS:000297594200107.

*Vzdělávání zaměstnaných osob*. (2017). Praha: Český statistický úřad.

Wrzosek, M. (2011). Modern technologies in education process of military students (national defence university experience). In *Meeting International Conference on Distance Learning, Simulation and Communication*. Brno, Czech Republic. pp. 258-265. WOS:000359950800040.

Zhuravlova, Y., Kichuk, N., Zhuravska, N., Yakovenko, O., Zhytnyk, V., & Yashchuk, S. (2021). The Problem Field of Professional (Vocational) Education: Innovations and Ways to Improve. *Estudios de economia aplicada*, Vol. 39, No. 5. <https://doi.org/10.25115/eea.v39i5.5274>.

## Acknowledgements

The paper was developed as part of the solution of a long-term strategy of the organization development Applied Economics in the Field of Defence.

## Contact details:

PhDr. Ľubomír Kubínyi, Ph.D.  
Department of Resources Management  
Faculty of Military Leadership  
University of Defence  
Kounicova 65  
662 10 Brno, CZECH REPUBLIC  
E-mail: [lubomir.kubinyi@unob.cz](mailto:lubomir.kubinyi@unob.cz)

Ing. Monika Davidová, Ph.D.  
Department of Resources Management  
Faculty of Military Leadership  
University of Defence  
Kounicova 65  
662 10 Brno, CZECH REPUBLIC  
E-mail: [monika.davidova@unob.cz](mailto:monika.davidova@unob.cz)  
Ing. Libor Jílek  
Department of Resources Management  
Faculty of Military Leadership  
University of Defence  
Kounicova 65  
662 10 Brno, CZECH REPUBLIC  
E-mail: [libor.jilek@unob.cz](mailto:libor.jilek@unob.cz)

Ing. Lucie Říhová  
Department of Military Science Theory  
Faculty of Military Leadership  
University of Defence  
Kounicova 65  
662 10 Brno, CZECH REPUBLIC  
E-mail: [lucie.rihova@unob.cz](mailto:lucie.rihova@unob.cz)

---

# PRISON LIBRARIES IN SLOVAKIA AS A SPECIFIC EDUCATIONAL ENVIRONMENT

---

Dominika Temiaková

## Abstract:

The study presents the use of the prison library in the adult women's correctional facility in Slovakia at the research sample of 186 women (29,5 % of female respondents from the basic set) employing the questionnaire method. We carried out our research in 2017. We correlated the use of the prison library with the variables of the female respondents' age, achieved educational level and length of sentence. We found that more than half of the female respondents spend time reading books. The research did not show that there is a statistically significant relationship between library use and age ( $p=0,828$ ), but there is a statistically significant relationship between the achieved educational level ( $p=0,024$ ) and the length of sentence ( $p=0.026$ ) (at the level of statistical significance  $p\leq 0,05$ ).

## Key words:

age, level of education, length of sentence, prison libraries, convicted women

## 1 INTRODUCTION

It has been a long held practice to provide reading materials to prisoners, but in the past this activity differed from library service today. The earliest mention of books being supplied to European and American prisoners as occurring in the seventeenth century. It was the practice of clergymen working to reform prisoners by providing them with religious books as an act of generosity and personal interest (Coyle, 1987, in: Garner, 2017). The focus of prison libraries began to change in the early 1900s – at this time the function of prison libraries began to more closely resemble public libraries (Wilkins, 1977, in: Garner 2017). Prison libraries began to change as the role of incarceration developed from being largely punitive to take on a more rehabilitative function (Conrad, 2017).

Current knowledge of prison library services exists mostly in the form of policy documents and international guidelines or publications written by those with experience of working in the profession. These publications explore the purpose of correctional libraries and provide practical advice on how best to manage and deliver library services. These articles provide helpful insights into policies and practices across the world but are mostly descriptive in nature and offer little in the way of theory development or empirical evidence of how individuals in prison benefit from these services (Finlay & Bates, 2018). Stearns (2004, p. 62) is critical of prison library literature for describing only “how a library functions rather than provide measurable evidence of how well it serves its mission.” He called for more comprehensive research that would offer more compelling evidence of the value of library services.

The authors Finlay & Bates (2018) in their study propose a theoretical model which draws on theories of desistance, informal learning theories and critical librarianship. This model can be used by both library and education researchers and practitioners to build a body of evidence on the value of the prison library and may act as a roadmap to good practice. It is an initial framework, intended to be adapted and refined as more empirical evidence is collected in this area. The are also decribes areas of impact of prison libraries.

Figure 1: Areas of Impact of Prison Libraries



Source: Finlay (2018, in Finlay & Bates, 2018)

The most common prison library model is the public library. This construct is based upon the notion that the entire prison comprises a microcosmic community. The major goal of the library should be to establish a “normalizing“ environment; ideally, the library should provide a space for inmates that is least encumbered by restrictions and rules. It is one of the few places in which incarcerated persons can approach some freedom. The library may be a place of recreation, an extension of the classroom, an information center, or a place for exchanging and sharing of ideas (Singer, 2017).

The importance of prison libraries is also highlighted by Krolak (2019, p. 13), as “Prison libraries play an integral role in their function as educational, informational and recreational centres for the entire prison community. They are places where people can gather to read, borrow books, carry out research, participate in organised activities, or enjoy the company of other people in a relaxed and safe environment. It is a space abounding with possibilities, all of which lend themselves to constructive ways of spending what all inmates have: time. Prison libraries, at their core, help create a literate environment. Although they provide services to all prisoners and prison staff, they often give special attention to prisoners with low literacy levels and non-native language backgrounds. The value of a prison library lies in its ability to help inmates become or continue to be lifelong learners. In other words, it is a social space that can inculcate a culture of reading and learning. Assisted exposure to a library can encourage prisoners to develop a long-term interest in and habit of reading. It is a systematic nudge in the right direction.“

Stevens (1995) reminds that many inmates are not totally illiterate, but their reading skills may be very poor. For these inmates, the library can be beneficial. In some cases, inmates who have only an elementary reading ability will borrow books from the library and often in a solitary but very highly motivated fashion will improve not only their reading but many other skills, too. In Sweeney’s study of female prisoners’ experiences of reading, she found that books could be used as a “tool for framing and making sense of their experiences”, and that “readers often become ‘agents in and of’ their own stories and learn to exercise some control over the meaning of their lives” (Sweeney, 2010, p. 7).

In Slovakia, Act No. 475/2005 Coll. on the execution of imprisonment (Section 32) characterises the education of convicts as a set of activities based on the active participation of the convicted person aimed at his/her integration into society



following his/her personal and social needs. According to Decree No. 368/2008 of the Ministry of Justice of the Slovak Republic, which issues the Regulations for the Execution of Imprisonment (§ 44), convicts' education consists of:

- general education teaching,
- cultural and sports activities,
- social education,
- **free use of library funds.**

Prison libraries are part of the convicts' education and one of the means of individual education of convicts. These libraries fulfil a cultural, informational, educational, social-adaptive, relaxation and instructional-methodological function. The fund of prison libraries consists of library fund, textbook fund, special fund and special service fund (Janos, 2003, p. 235). The library is established in each facility, and convicts can use it during their free time and engage in self-education. The library collection is made available to convicts through a catalogue of book titles (Decree No. 368/2008, issuing the Regulations on the Execution of Imprisonment, § 33, § 46).

The correctional facilities primarily acquire books by donation, based on a donation agreement, whether from members and staff of the Corps, former members of the Corps staff, private persons, embassies, or as a donation from the authors themselves and participants in the sessions as part of cultural and educational activities. The correctional facility in Nitra cooperates closely with the Karol Kmeťko Regional Library in Nitra. They organise talks and exhibitions for convicts every year, and this library provides the correctional facility with approximately 100 book titles each year as a donation (www.zvjs.sk, 2021).

The use of prison libraries can also represent a crucial facilitative aspect in the second-chance education of the convicts. Only a few authors have been researching second-chance education in the conditions of Slovak and Czech prisons (e.g. Lukáčová & Lukáč & Pirohová & Lukáč & Hartmannová, 2018, Pirohová & Lukáč & Lukáčová, 2018, Lukáč & Lukáčová & Bolfíková & Pirohová, 2020, Veteška & Fischer, 2020, Kříž, 2021). Second-chance education (or second-chance schools) is a concept based on the belief that the individual can constantly reinterpret his or her being. The philosophical premise underpinning second-chance education is that mistakes made by the selective mechanisms of the school system or by individuals that led to

the termination of their educational trajectory can be corrected later (Yogev 1997, in: Ross & Grey 2005).

Second-chance education enables a person who, for various reasons, has not received primary or secondary education to supplement or extend his or her education and thus obtain evidence of educational attainment. The aim is to reintegrate young people at risk of social exclusion by offering them an accessible range of tailored education and training opportunities. However, non-formal education (especially in the retraining system), aimed at increasing employability, has been more developed in our context (Lukáčová & Temiaková, 2020).

To reflect these theoretical starting points, we proposed the following research questions:

- RQ<sub>1</sub>: Is there a statistically significant relationship between respondents' use of the prison library and the variable of their achieved educational level?
- RQ<sub>2</sub>: Is there a statistically significant relationship between respondents' use of the prison library and the variable of age?
- RQ<sub>3</sub>: Is there a statistically significant relationship between respondents' use of the prison library and the variable of the length of sentence?

## 2 METHODS

### 2.1 Instruments

We used a questionnaire in print form in the research, designed by the author. After a personal delivery, employees of the given facility (executive director for the Imprisonment Department, employees in duty, pedagogue) directly administered this questionnaire to convicted women. It consisted of 25 items; four items were of socio-demographic character (age, achieved education, marital status and number of children). The items were predominantly closed or semi-closed with a choice of answers; two items had a scale (a four-level and five-level scale). The research tool primarily focused on the education of convicted women in the correctional facility. The Cronbach's alpha of the questionnaire is  $\alpha = 0.764$ .

## 2.2 Statistical analysis

We statistically processed the obtained data in the programme SPSS version 22 for Windows. We used the descriptive statistics methods (N, M, SEM, SD, Min, Max, SK, KU) and inferential statistic method: Pearson's Chi-Square Goodness of Fit Test, also called Chi-Square Test of independence (correlation is significant at the probability level  $p \leq 0.05$ ). According to Lyócs & Baumöhl & Výrost (2013, p. 94), its principle "consists in estimating the expected abundance in the respective numerical intervals. The expected abundance answers to the following question: How many values should be in the relevant interval if it were true that the values come from the theoretical probability distribution (the distribution we are testing)? The larger the difference between the observed frequency and the expected frequency, the less we will tend to believe that the observed values come from the theoretical probability distribution." If it was necessary to ensure  $e_j = np_j > 5$ , we combined two adjacent intervals so that the sum of their frequencies satisfied this condition. We calculated the degrees of freedom for this test using the formula  $Df = (x-1) \cdot (y-1)$ .

## 2.3 Research sample

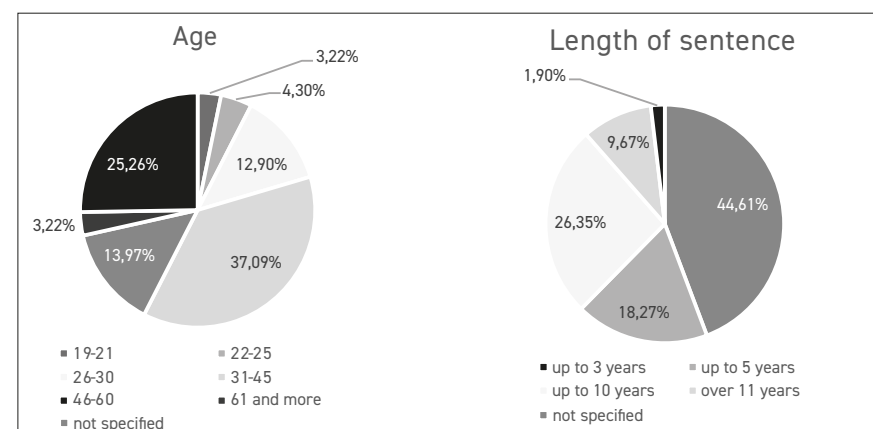
In Slovakia, the imprisonment sentence of convicted women primarily occurs in two specialised facilities - the Correctional facility Levoča (capacity of 112 places) and the Correctional facility Nitra - Chrenová (capacity of 354 places), where we carried out our research. In 2017, when we collected our data, there were, in total, 630 convicted women (basic set, Yearbook of Prison and Court Guard Service from the year 2017, 2018).

Our research sample consisted of 186 adult women, representing a percentage rate of 29.5 % (almost  $\frac{1}{3}$  of female respondents from the basic set). The average number of convicted women in the correctional facility Nitra Chrenová was 252 women during the data collection time. Thus, up to 73,8 % of convicted women from the given facility participated in our research. The research set included imprisoned convicted women in all three surveillance degrees.

We divided respondents into six categories according to their age (19-21 years; 22-25 years; 26-30 years; 31-45 years; 46-60 years; 61 and more years, and finally, not mentioned age). The average age of respondents was 38.43 years (min 20; max 66). The educational level of respondents was heterogeneous; up to 50 % of

respondents achieved primary education (low education, level of ISCED 2A), 16,12% of respondents achieved secondary education without a school-leaving exam (medium education, level of ISCED 3C) and secondary education with a school-leaving exam (medium education, level of ISCED 3A; 3B). Only about 2,5 % of respondents achieved academic education (high education, level of ISCED 6 or 7). We categorised the respondents' punishments into four groups regarding the length of sentence. The average length of sentence was  $M=61.08$  months (Min=3; Max=324; Sd=55.845) and  $M=5.09$  years, respectively. More than 18 % of the female respondents have short term sentences ranging up to 5 years (inclusive). Medium-term sentences of up to 10 years are served by about 26 % of the convicts. About 10 % of female respondents have more than 10 years of long-term sentences. Most female respondents have the length of sentence between 6 and 10 years. Groups of female respondents with the length of sentence between two and three years and between four and five years are similarly proportional (close to 19 % each) (Figure 1).

**Figure 2: Categorisation of female respondents according to their age, educational level and length of sentence**



Source: own elaboration

## 3 RESULTS

We also subjected the data to Pearson's Chi-Square Goodness of Fit Test concerning prison library use. We investigated whether there was a statistically significant relationship (at the  $p \leq 0.05$  level of statistical significance) between the use of the

prison library and the variables of respondents' age, educational level and length of sentence.

Based on the test results, we found no statistically significant relationship between the respondents' use of the prison library and their age ( $p=0.828$ ). However, there is a correlation between the use of the prison library and convicts' achieved educational level (Table 1).

**Table 1: Prison library use concerning the achieved level of education**

Level of education	No use of the library		Use of the library		N
	$o_i$	$e_i$	$o_i$	$e_i$	
primary	41	32,58	42	50,5	83
	25,15%	19,98%	25,76%	30,98%	50,92%
upper-secondary	16	20,9	37	32,1	53
	9,81%	12,82%	22,69%	19,69%	32,51%
post-secondary and bachelor/master	7	10,5	20	16,4	27
	4,29%	6,44%	12,26%	10,06%	16,56%
N	64		99		163
%	39,26		60,73		100

$o_i$  – observed frequency;  $e_i$  – expected frequency  
Chi-Square: 7,418, df=2,  $p=0,024$

Source: own elaboration

The probability value was  $p \leq 0.024$ , implying a statistically significant relationship between the use of the prison library and respondents' education. The data was distributed most differently (observed and expected frequency) for female respondents with primary education (approximately within 10 points). Similarly, the test also confirmed the dependence on the respondents' length of sentence (Table 2).

**Table 2: Prison library use concerning the length of sentence**

Length of sentence	No use of the library		Use of the library		N
	$o_i$	$e_i$	$o_i$	$e_i$	
up to 3 years	38	28,9	35	44	73
	22,7%	17,03%	20,95%	26,34%	43,71%
up to 5 years	8	13,04	25	20	33
	4,79%	7,8%	14,97%	11,97%	19,76%
up to 10 years	15	17,8	30	27,3	45
	8,98%	10,65%	17,96%	16,34%	26,94%
over 10 years	5	6,3	11	9,7	16
	2,99%	3,77%	6,58%	5,8%	9,58%
N	66		101		167
%	39,52		60,47		100

$o_i$  – observed frequency;  $e_i$  – expected frequency  
Chi-Square: 9,199, df=3,  $p=0,026$

Source: own elaboration

We found a statistically significant relationship ( $p=0,026$ ) in the relationship between library use and the length of sentence. The data distribution was most pronounced for convicts with the shortest length of sentence (range up to three years).

Research confirms that the use of the prison library is popular with female inmates. As many as 55 % of respondents read books from the prison library, 36 % did not use the library (for example, the lack of foreign language literature was one of the reasons given by the respondents), and 9 % did not answer. For the sake of interest, we can note that the most widely read genres among female convicts include novels, crime, historical and science fiction stories. The research did not show a statistically significant relationship between library use and age (RQ1) – which means that age does not depend on whether a convict reads or not, but educational level and length of sentence does (RQ2, RQ3).

The most significant differences in data distribution were for convicts with primary education (the observed frequency in library use was lower than the expected frequency). It means that the lower the education of the convict, the less she uses the prison library, and with a sentence length of up to three years (the observed frequency was higher than expected for not using the library. On the contrary, it was lower than expected for using the library). The obtained results imply that

convicts with a sentence length of up to three years read the least (the shorter the prison sentence, the less they read).

The CPT Committee, based on its visits to prisons in the Slovak Republic, also regularly notes in its reports (2018) that reading books is one of the few activities that many sentenced and convicts (including those sentenced to life imprisonment) engage in during their isolation in their cells. For this reason, we consider it essential to view prison libraries as a specific educational space that encourages lifelong learning for imprisoned people.

## 4 RECOMMENDATIONS FOR SLOVAK PENITENTIARY RESEARCH

In Slovak conditions, the research on convicted women has been absent until now. Authors pay attention mainly to people released from the imprisonment sentence because there is better and easier access to respondents. There are two options for conducting research; either the Prison and Court Guard Service conducts its research projects, or research is conducted in project partnerships with other institutions. In specific cases, university students may also carry out research. In this case, however, the cooperation is mainly through a cooperation agreement. Research, if authorised, may only be carried out without direct contact with sentenced and convicts. Thus, the researcher outside this setting can use the only possible methodological tool - the questionnaire. The reasons for this are apparent - the administrative work for prison staff, the protection of personal data and the ethical aspect of conducting such research.

A similar situation is also in the Czech Republic because Urbanová, Večeřa (2003) say that underestimating women's criminality represents a danger. In their opinion, although women commit less severe crimes, their moral consequences are more significant. Thus, generally, in the research on convicted women, it is still valid that "as many scholars have noted, at best, [women] remain marginal to the study and practice of imprisonment." (Moore, Scraton 2014, cited in Crewe, Hulley, & Wright, 2017, p. 1374). It is crucial to change this situation because only with research can we understand the world of convicted women that significantly differs from convicted

men's world. In this way, we can make more efficient the re-socialisation methods and the general way of dealing with these women and their imprisonment.

By researching a penitentiary environment, we justify the use of the qualitative methodology in this specific environment as it is done abroad - to get to know the actor, the terrain, to experience the situation, to "feel" the atmosphere, to be at least for a moment *in medias res*, even at the expense of the impossibility of generalising the findings. We are grateful for the unique opportunity to carry out research in a penitentiary setting. However, the partial results we present here show the occasional contradictory nature of the answers. The socially desirable responses, which convict women undoubtedly believe the researcher wants to 'read', significantly distort the status quo.

## References

- Conrad, S. (2017). *Prison librarianship policy and practice*. Jefferson, NC: McFarland & Company.
- Crewe, B., & Hulley, S., & Wright, S. (2017). The Gendered Pains of Life Imprisonment. *The British Journal of Criminology*. 57(6), 1359-1378.
- Finlay, J., & Bates, J. (2018). What is the Role of the Prison Library? The Development of a Theoretical Foundation. *Journal of Prison Education and Reentry*. 5(2), 120-139.
- Garner, J. (2017) Australian Prison Libraries: A Study of Existing Knowledge and Recent Findings. *Journal of the Australian Library and Information Association*. 66(4), 331-343.
- Jánoš, J. (2003). Knižnice Zboru väzenskej a justičnej stráže. *Knižnica*, 4(5), 235-239. Avialable on [http://www.snk.sk/swift\\_data/source/casopis\\_kniznica/2003/maj/235.pdf](http://www.snk.sk/swift_data/source/casopis_kniznica/2003/maj/235.pdf)
- Krolak, L. (2019). *Books beyond bars. The transformative potential of prison libraries*. Hamburg: UNESCO Institute for Lifelong Learning.
- Kříž, J. (2021) Use of online tools in further professional training of the Prison Service of the Czech Republic In *Kursch, M., Veteška, J. (eds.) Vzdělávání dospělých 2020 – reflexe, realita a potenciál virtuálního světa. = Adult Education 2020 – Reflection, Reality and Potential of the Virtual World: proceedings of the 9th International Adult Education Conference : 16 December 2020, Prague*. Praha: Česká andragogická společnost. 78-89.
- Lukáč, M., & Lukáčová, S., & Bolfíková, E., & Pirohová, I. (2021). Education at Second Chance Schools during the first Wave of the COVID-19 Pandemic in Slovakia – Tools, Methods, Effectiveness. *Ad Alta*. 11(2), 162-170.
- Lukáčová, S. & Lukáč, M. & Pirohová, I., & Lukáč, E., & Hartmannová, L. (2018). Prison education in Slovakia from the teacher's perspective. *Journal of Prison Education and Reentry*. 5(1), 63-79.
- Pirohová, I., & Lukáč, M., & Lukáčová, S. (2018). Initiate Education In Context Of Multicultural Approach Towards Education Of Adult Roma From Marginalized Communities. *Ad Alta*. 8(1), 196-201.
- Lukáčová, S., & Temiaková, D. (2020). Druhošancové vzdelávanie dospelých vo výkone trestu odňatia slobody. *Mladá veda*, 8(1), 167-179.
- Lyócsa, Š., & Baumöhl, E., & Výrost, T. (2013). *Kvantitatívne metódy v ekonómii II*. Košice : Elfa.
- Ross, S., & Gray, J. (2005). Transitions and Re-engagement through Second Chance Education. *Australian Educational Researcher*. 32(3), 103-140.
- Singer, G. (2017). Prison libraries inside out. *Education Libraries*, 24(1), 11-16.
- Stearns, R. M. (2004). The prison library: An issue for corrections, or a correct solution for its issues? *Behavioural & Social Sciences Librarian*, 23(1), 49-80.
- Stevens, T. (1995). *The role of the prison libraries in the reform and rehabilitation process*. Sheffield: The University of Sheffield.
- Správa pre vládu slovenskej republiky o návšteve slovenskej republiky, ktorú uskutočnil európsky výbor na zabránenie mučeniu a neľudskému či ponižujúcemu zaobchádzaniu alebo trestaniu (CPT) v dňoch 19. až 28. marca 2018 (2018). Avialable on: <https://rm.coe.int/168094fd72>
- Sweeney, M. (2010). *Reading is my window: Books and the art of reading in women's prisons*. Chapel Hill: The University of North Carolina Press.
- Urbanová, M., & Večeřa, M. (2003). Ženská kriminalita – hodnotové orientace a postoje k právu delikventních žen. *Časopis pro právní vědu a praxi*, 11(3), 232-240.
- Veteška, J., & Fischer, S. (2020) *Psychologie kriminálního chování. Vybrané otázky etiologie, andragogické intervence a resocializace*. Praha: Grada.
- Vyhláška č. 368/2008 Z. z.. Vyhláška Ministerstva spravodlivosti Slovenskej republiky, ktorou sa vydáva Poriadok výkonu trestu odňatia slobody (v znení neskorších predpisov)
- Zákon č. 475/2005 Z. z. o výkone trestu odňatia slobody v znení neskorších predpisov
- Zbor väzenskej a justičnej stráže, Aktuality. *Knihy sú medzi väzňami stále populárne. Aké príbehy ich najviac lákajú?* (2021). Avialable on <https://www.zvjs.sk/sk/aktuality/knihy-su-medzi-vaznami-stale-popularne-ake-pribehy-ich-najviac-lakaju>
- Ročenka Zboru väzenskej a justičnej stráže za rok 2017. (2018). Avialable on <https://www.zvjs.sk/file/df469434-fffe-4d23-8146-063eb389b0eb.pdf>

## Acknowledgment

The paper is an outcome of the APVV project 18-0018 „Teaching at second chance schools from the perspective of a teacher and an adult learner“ (Slovak Research and Development Agency).

## Contact details:

doc. PhDr. Dominika Temiaková, PhD.  
Department of Pedagogy  
Faculty of Education  
Constantine the Philosopher University in Nitra  
Dražovská 4  
949 01, Nitra, SLOVAKIA  
E-mail: dtemiakova@ukf.sk

---

# ANDRAGOGICAL GUIDANCE IN THE PROFESSIONAL DEVELOPMENT OF TEACHERS

---

Marian Valent, Anna Pávová

## Abstract:

The main goal of the article is to present the findings of a qualitative research focused on the applicability of the proposed model of andragogical professional guidance for teachers. We found out which parts the respondents agreed with the most, for each level separately - individual, team, school. The research provided us with answers to the design of the guidance model and named the conditions and threats to the success of guidance for teachers.

## Key words:

professional development, andragogical guidance, teachers, model, school

## 1 INTRODUCTION

The Memorandum on Lifelong Learning (EU, 2000) proposes "improving guidance in lifelong learning". This is especially necessary for people who deal with lifelong learning, i.e. teachers. Previous findings in the Slovak Republic suggest that in the practice of schools no conditions are created for systemic support of professional development and career management of teachers. The concept of andragogy guidance is very rarely used in schools to support the professional development of teachers. The unsystematic elements of professional development are most visible in this period, when the new law on pedagogical staff and professional staff introduced the structure of professional development into the system and it is obvious that they do not understand it in schools and cannot deal with it. Until now, continuous education has played the main role, which is currently considered to be only one part of professional development.



Professional development is defined as an ongoing process involving all dimensions of a teacher's personality development, including their competencies. A teacher uses (or further develops) personal preconditions and internal motivation to develop the ability to learn throughout life and use opportunities for education or learning and to creatively improve the quality of professional performance and education of students (according to Pavlov, 2013, p.26). The development process can be divided into three parts: professional qualifications (undergraduate education); introduction to the teaching profession and the process of professional development (Khan & Afridi, 2017, p.213). The period of professional development, which includes the entire period of the profession, can be considered the longest. At the same time, this division suggests that the professional development of teachers does not end with the completion of undergraduate education, on the contrary, it only begins with it.

This is mainly due to the fact that the requirements for the teaching profession are evolving rapidly and require the need for new approaches. In their research, Marcut and Kifor came to similar conclusions, stating that initial teacher education provides a small part of the necessary competencies and that teachers need lifelong learning to be able to cope with all the challenges and professional requirements in their careers (2017, p.228 -230). Quality undergraduate education can prepare a person for a start in the profession, especially by preparing a reflective graduate who is ready to learn and develop professionally throughout their life. In order to remain in the profession, in addition to quality undergraduate training (with the graduate knowing which profession they are actually entering), it is necessary to emphasize the need to provide special support for teachers, especially beginning teachers.

In these early stages of the profession, it is not just a question of confirming one's own professionalism, but in many cases also of remaining in it. In the further process of professional development, action research is proving to be one of the most effective strategies for professional development. Posch (2019) described action research as an umbrella term, which is characterized by substantial control of the expert over the researched practical situation and the research process itself. He further distinguishes between two basic types of interests: "Developmental interests on the one hand (What would I like to develop or change?) and cognitive or research interests on the other hand (What would I like to find out or understand?)". In the field of career development, Garet (2001, In. Celik, 2017, p.132), included among the factors which contribute to career development the following: teacher's knowledge, effective educational opportunities and other development activities.

Celik further states (2017, p.133) the characteristics of effective professional development of teachers and the factors which make it successful: the point of career development, the content of career development and the method of career development. For the development of teachers, it is possible to consider as significant development one that is realized within teaching staff as a primary community of each teacher. Hanfstingl and Pflaum (2020) also state that the impact of professional development clearly depends on successful collaboration in teaching communities. In doing so, they found that such communities depended on several conditions for success, such as supportive leadership, group composition and group dynamics, and last but not least, mutual trust and respect.

In addition, Darling-Hammond and Richardson (2009) point out that effective collaboration requires much more than just bringing teachers together, so we need to learn how schools can shape and support teacher communities which work together. In addition, according to Johannesson (2020), participation in the learning community requires commitment, imagination and harmony. For our context at the team level, it is also possible to identify the perceptions of the respondents who spoke about the collective effort to improve teaching methods focused on specific areas of school improvement and also to develop a culture of research. The learning community is best implemented on the basis of changes in the educational process. In their research, Garet, Porter, and Desimone (2001) also point to the active involvement of teachers in meaningful activities with the potential to change teaching and provide feedback to teachers by observing their teaching, including multi-teacher collaboration (e.g. networking).

The basic starting point, on which our concept of andragogical guidance is based, is **humanistic psychology and guidance**. The concept of education or guidance focused on learner's personality or **client-oriented guidance approach** is based on humanistic ideas. The basic principle of this approach is that **all human beings have a positive direction**. A very important approach to guidance, which we take into account in the given context, is the **systemic approach**. According to Giertl, these are ways of thinking and acting when working with people, which one understands as an autonomous (competent) and competent (eligible) system and treats a group of people as a social system (2004, p.30).

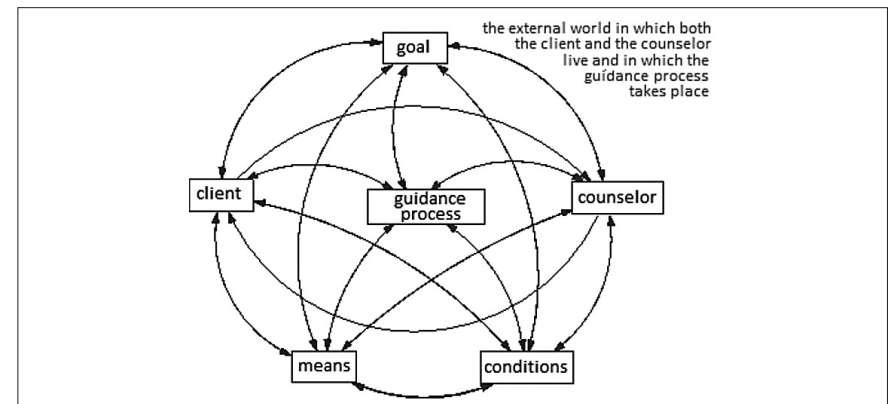
From the number of guidance approaches which are described in the literature, we choose the one based on the principles of humanistic psychology and also uses

the principles of a systemic approach, i.e. an **experiential approach**. A person is perceived as an active being with the potential for further growth, focusing on achieving a higher state of consciousness, awareness of their possibilities and abilities to learn to use them. In this approach, a counselor serves mainly as a catalyst and a client uses their presense to realize their own latent contingencies to form their "self" and to find a solution which is feasible within their capabilities using above all their own forces. Helus (2012) classifies guidance and consulting services among the six items of complex teacher care. Hanfstingl and Pflaum state that trends in this field around the world are shifting from in-service teacher education to long-term teacher guidance (2020).

Robertson (2013) deals with the concept of the impact of guidance on contentment, health, happiness – i.e. well-being of a person (client). One approach to this concept admits that healthy functioning is not just a matter of experiencing positive emotions as an individual. Engaging in meaningful activities, taking responsibility and striving for personal growth is considered to be important and going hand in hand with accepting productive roles in society. The author argues that in connection with the relationship of supportive career guidance, clients may be provided with emotional support when solving problems with negative thinking, which help them cope with distress. According to him, unlike the therapeutic environment, emotion management is not usually an agreed goal of the intervention, but emotional support is still a common element of the process.

In this context, a guidance model has also been proposed, which has been the subject of qualitative research. This model (Figure 1) was created based on processing the theoretical basis as well as the results of the quantitative research which preceded this qualitative probe.

**Figure 1: Model of the guidance process (adapted according to Blížkovský, 1992, p.71, processed in the VENSIM program)**



The research problem is the modeling of innovative approaches focused on andragogical professional guidance of school organization management, learning teams and learning individuals. The research problem is defined by the question:

**Under what conditions is the design of an andragogical career guidance model usable for the professional development and management of teachers' professional careers?**

The aim of the qualitative survey was to examine the applicability of the andragogical career guidance model developed for individual, team and school levels. For these purposes, we have asked the following research questions in this part of the research:

- What do respondents think about the design of an andragogical career guidance model for the professional development and management of teachers' professional careers?
- What supporting factors (conditions) condition the successful application of the andragogical career guidance model? –perspectives
- What conflicting factors (conditions) hinder the successful application of the andragogical career guidance model? - barriers

*Sub-objectives:*

- to create a proposal for a model of andragogical professional guidance

- to find out the opinions of leading pedagogical staff on the design of the model and its expected impact on the professional development and management of the professional career of teachers
- identify perspectives and barriers to the application of model design in schools

## 2 METHODS

The group interviews were conducted by two moderators online, using semi-structured interviews with a five-question framework. The interviews were first transcribed. After collecting and organizing the data, the data was analyzed, moving from data to interpretation and back. The data was processed using their coding, subsequent display (e.g. in tables or diagrams) and sorting and reduction of data on a comparative principle – comparison of individual samples (kindergartens, primary schools, secondary schools and teachers of professional development).

## 3 RESULTS AND DISCUSSION

The research sample for focus groups is represented by the leading pedagogical staff of kindergartens - 8 people, the leading pedagogical staff of primary schools - 5 people, the leading pedagogical staff of secondary schools – 6 people, the teachers of professional development in MPC - 8 people. A total of 4 focus groups with a total of 27 participants were held, with 54% of the respondents participating.

The results are processed in the following text as answers to research questions.

### *1. What are the respondents' views on the design of an andragogical career guidance model for the professional development and management of teachers' professional careers?*

The draft of the guidance model was evaluated by the participants of the focus interviews mostly positively, they described it as simple, clear, but at the same time detailed and complex. They had no major comments on this model implemented by external consultants. Several suggestions concerned the addition of other sections,

such as measurable indicators at the end of the consultation or highlighting the identification of the external environment. For the implementation of this model, for example by principals in schools, its simplification (merging some parts into complete packages) is necessary.

The design of the model, which was assessed by the participants, took into account all important components of the guidance process and was clarified in a scheme which allowed to follow the logical sequence of individual steps. One suggestion was to use a different way of displaying, which would simplify these areas and would not be so demanding in focusing on a more complex diagram. This proposal was accepted and the model was modified to include only the main names of the individual stages (these stages were subsequently described in text).

### *2. What supporting factors (conditions) condition the successful application of the model of andragogical professional guidance? - perspectives*

The motivation of teachers appeared in all interviews as a key factor which determines the success of guidance. The interviewers considered it important also when entering the guidance, so it was included in the preconditions for the success of the guidance. These findings on motivation are consistent with research by Bimrose, Barnes and Hughes (2008). Respondents also attributed it to the benefits of guidance - increased motivation of teachers as a long-term manifestation of guidance clients. Motivation was further associated with the will of teachers to change something and subsequently with the satisfaction of teachers. A personal and professional approach was expected from the consultant.

Within the course of guidance, it is important to be able to set up guidance according to the specifics or needs of both the individual and the school. The advice should be comprehensive and understandable for the client, regular, lasting longer. The key result is a finished product which is mostly tangible (real object) – e.g. personal professional development plan or professional development plan of all school staff, or named topics for further education. An important aspect is also the expectation of a positive growth in both the individual and the school. A very positive element is their expectation to prepare an internal staff member who would be able to provide help and support for their colleagues at school level (whether the person was a teacher or someone from school management). In this case, they expect the

education and training of such a person from the teaching staff to be adequately prepared for this role.

### *3. What conflicting factors (conditions) hinder the successful application of the andragogical career guidance model? - barriers*

Among the threats which could hinder the success of the guidance, the participants included, in particular, the feeling of threat. According to them, this feeling can also be evoked by teachers' personality or their previous experience with education, fears of opening up to a stranger but in some cases also to a person from school. Many other barriers subsequently follow from this feeling of threat, such as a lack of interest in cooperating with a counselor or defending against new ideas, accepting new challenges, and formalism.

An important element in the level of barriers can also be considered distrust in the counselor caused by the fact that teachers do not know the counselor or the counselor does not know how to tune in to people, or loses confidence during the guidance process. Within the guidance process itself, the key barrier is the expected bureaucracy which the participants associate with it. It should be noted here that some way of documenting the guidance process will be needed. The participants claimed that they were able to accept the range of guidance.

However, they want to ensure that it is not necessary to prepare a number of documents in the guidance process, the purpose of which they will not know or will prove to be unnecessary, unused in the guidance. At the same time, they consider it the most satisfactory if they do not have to create any documents and those which are already available at school are used. It will not be possible to meet these expectations in every situation, as not all documents will be available in every school or from every person (e.g. a personal professional development plan or even a school professional development plan).

## **4 CONCLUSIONS AND RECOMMENDATIONS**

The design of the guidance model was evaluated positively in the interviews, with a minimum number of key comments. One of the proposals was to simplify the

proposal for internally provided guidance in order to make the stages of guidance clearer. The interviewees described the basic expectations from the guidance as:

- directing guidance towards the goals and needs of the school, mediated to pupils (the issues related to the inclusive approach were specifically mentioned),
- identification of the initial state and development needs at the level of the school and the individual, the resulting overview of the current situation (such as a description of the state, not its evaluation, judgement or condemnation),
- harmonization of individual and school professional development planning,
- the establishment of an internal consultant who, if necessary, would also be a contact person with external consultants,
- gaining the belief in people that professional development is needed, providing assistance in introducing innovations, or in solving problems, and finally
- a qualitative progress in both the individual and the school levels with the potential to induce further growth.

The motivation of teachers dominated the identified conditions, which mean the success of the introduction of guidance and the barriers which prevent it. The interviews showed that this is a key prerequisite for entering the guidance, to stay in the guidance process and they consider improvement of motivation to be a long-term benefit of the guidance. In this context, it is therefore a crucial area which will need to be addressed in further research projects on this issue. For the practical implementation of guidance, this means starting such cooperation with schools and individuals, which will involve less motivated teachers in the guidance process.

The counselor is able to further motivate the teacher to stay in it not only at the beginning but also during the guidance process. By accompanying and building trust with a particular teacher, the expected benefits will be achieved in terms of a teacher's professional development and also in the long-term aspects related to a teacher's motivation, satisfaction or will to develop further. It will certainly be a difficult task, because many teachers are not motivated to enter the guidance, others are burned out and unwilling to do anything extra.

The answers suggest that it is very important for professional development, planning and implementation that it is a common process leading to school development. Professional development thus becomes a tool for achieving the school's goals, which are subsequently beneficial for students. The meaningfulness of this development thus acquires new dimensions, which can be included among the motivating factors at all levels of professional development. Therefore, a school culture which promotes dialogue and learning, whether individual or collaborative, is important. Small victories on this path can mean the steps which are necessary to keep on the path all the time. This is extremely important for the teaching profession, as the profession itself is based on human development.

The identified findings also lead to recommendations for other research projects:

- pilot a modified guidance model proposal and carry out action research with pilot schools or individuals (currently underway),
- to pay more attention to the motivation factor in further quantitative and qualitative research on teacher professional development,
- longitudinally monitor the progress in individuals and schools after a certain time from guidance, e.g. after 1, 2 and 4 years (since the basic product of the guidance is a personal professional development plan and a school professional development plan for 4 years),
- an interesting aspect of the research can also be considered the amount of documentation which guidance requires for an individual, team or school, also with regard to the size of the school or the number of involved teaching staff.

## References

- Bimrose, J., Barnes, S-A. & Hughes, D. (2008). *Adult Career Progression and Advancement: A five-year study of the effectiveness of guidance*. Warwick Institute for Employment Research/Department for Innovation, Universities and Skills. Retrieved from: <https://warwick.ac.uk/fac/soc/ier/publications/2008>
- Blížkovský, B. (1992). *Systémová pedagogika pro studium a tvůrčí praxi*. Ostrava: Amosium servis.
- Celik, B. (2017). *Career Development of Teachers: Importance and Benefits*. International Journal of Social Sciences, 4(1), 131-135. DOI: 10.23918/ijsses.v4i1p131
- Darling-Hammond, L. & Richardson, N. (2009). *Research Review/teacher Learning: What Matters?* Educational Leadership 66(5), 46–53. Retrieved from: <https://outlier.uchicago.edu/computerscience/OS4CS/landscapestudy/resources/Darling-Hammond-and-Richardson-2009.pdf>
- Garet, M.S., Porter, A.C. & Desimone, L. et al. (2001). *What makes professional development effective? Results from a national sample of teachers*. American Educational Research Journal, 38(4), p.915-945 Retrieved from: <https://journals.sagepub.com/doi/abs/10.3102/00028312038004915>
- Giřtlová, K. (2004). *Manažovat a koučovat systemicky? Áno*. Banská Bystrica: Co/Man, 1.systemická spol.
- Hanfstingl, B. & Pflaum, M. (2020). *Continuing professional development designed as second-order action research: outcomes and lessons learned*. Educational Action Research, DOI: 10.1080/09650792.2020.1850496
- Helus, Z., Bravená, N. & Franclová, M. (2012). *Perspektivy učitelství*. Praha: Pedagogická fakulta Univerzity Karlovy
- Johannesson, P. (2020). *Development of professional learning communities through action research: understanding professional learning in practice*. Educational Action Research. DOI: 10.1080/09650792.2020.1854100
- Khan, M.A. & Afridi, K.A., (2017). *Professional Development of Teachers and its Future Needs. Dialogue (Pakistan)*. 12(2), 211-228. Retrieved from: <http://eds.b.ebscohost.com/eds/detail/detail?vid=1&sid=b0d3c112-f77a-4312-9045-2853e1db4c07%40pdc-v-sessmgr01&bdata=JmxhbmcyY3Mmc2l0ZT1lZHMtG1ZSZzY29wZT1zaXRl#AN=124500787&db=edb>. ISSN 18196470



Marcut, I.G. & Kifor, S. (2017). How Did i Become a Good Teacher? Implications for Teacher Education. *Balkan Region Conference on Engineering and Business Education* . 3(1), 223 - 232. DOI: 10.1515/cplbu-2017-0030. ISSN 23918160

*Memorandum o celoživotnom vzdelávaní sa. Pracovný materiál EK.* (2000) Brusel. Retrieved from: [https://www.minedu.sk/data/files/2607\\_2000\\_memorandum\\_o\\_celozivotnom\\_vzdelavani.pdf](https://www.minedu.sk/data/files/2607_2000_memorandum_o_celozivotnom_vzdelavani.pdf)

Pavlov, I. (2013). *Štandardizácia profesijných kompetencií učiteľov (východiská a perspektívy)*. Prešov: Rokus.

Posch, P. (2019). "Action Research – Conceptual Distinctions and Confronting the Theory–practice Divide in Lesson and Learning Studies." *Educational Action Research* 27(4), 496–510. DOI:10.1080/09650792.2018.1502676.

Robertson, J. P. (2013). *The well-being outcomes of career guidance*. *British Journal of Guidance & Counselling*, 41(3), 254-266. DOI: 10.1080/03069885.2013.773959

## Acknowledgements

The article was supported by the project APVV-16-0573: Application of the model of andragogical counselling in the context of teacher professionalization – MAPUS, responsible researcher prof. PaedDr. Ivan Pavlov, PhD.

## Contact details:

Mgr. Anna Pávová  
Department of Andragogy and Pedagogy  
Faculty of Education  
Matej Bel University  
Ružová 13  
974 11 Banská Bystrica, SLOVAKIA  
E-mail: [anna.stetinova@gmail.com](mailto:anna.stetinova@gmail.com)

Mgr. Ing. Marian Valent, PhD. et PhD.  
The Methodology and Pedagogy Centre  
Horná 97  
974 01 Banská Bystrica, SLOVAKIA  
E-mail: [valent.mrn@gmail.com](mailto:valent.mrn@gmail.com)

# EMPIRICAL ASPECTS OF EDUCATIONAL NEEDS OF HEADTEACHERS IN COMPARISON WITH ABROAD

Mária Pisoňová, Mária Pappová

## Abstract:

The paper outlines empirical background in the creation of a curriculum for education managers education. It provides a brief overview of the input components into the creation of content and implementation of functional education programmes for headteachers of Slovak schools and its equivalents. It provides the reflection of the level of managerial training for headteachers in the Slovak Republic and the Czech Republic through the main parts of an empirical comparative study.

## Key words:

education management, curriculum, legislation, functional education, lifelong learning, comparative study, research findings

## 1 INTRODUCTION

The requirements of the present orient the process of management of educational institutions towards the environment of market mechanism; from education managers, it requires a substantially wide range of knowledge, skills and competences, cyber principles respected in managerial practice, and principles of human resources management which significantly determine a person-oriented approach (Pisoňová in Pisoňová et al., 2021). Legal support as well as the content of functional education and its equivalent in higher education institutions are based on empirical surveys on educational needs of leading pedagogical staff. The curriculum is based on the empirical trends from abroad, managerial science, and examples of good practice.

In the paper, we reflect the above-mentioned backgrounds on the platform of the theoretical basis and by presenting the results of the empirical survey on the level of



managerial training for headteachers in the Slovak Republic and the Czech Republic with focus on selected areas.

## 2 THEORETICAL ANALYSIS OF THE CURRENT FOCUS OF THE FUNCTIONAL TRAINING CONTENT AND ITS EQUIVALENT IN THE PROFESSIONAL DEVELOPMENT OF HEADTEACHERS ACCORDING TO THE LEGISLATION IN FORCE

Management is a subjective, purposeful human activity aimed at setting the right objectives, and the most appropriate paths and means to achieve them; management is the summary of all activities that need to be carried out to ensure the function of the organisation (Sedlák, 2008; Malejčík, 2006; & Veber et al., 2009). In the case of education management, the accent on social management principles, cyber principles, and human resources management principles, which significantly determine the person-centred approach, is understandable. Some important features of the professionalism of the head of an educational institution that should be emphasised are professionalism, personal and professional experience, design of an individual vector for professional development; mental capacities and understanding of the essence of managerial work and procedures; understanding of the official and functional duties of the head of education, professional reliability; necessary communication method; professional reflection, anthropological abilities and establishing external and internal relations (Lopukhina & Stiahunova, 2021).

As it is in holistic approaches, each and every element or part within the large and complex school system as a whole inevitably has a context that influences it (Shaked, H. & Schechter, Ch., 2017). The purpose of leadership and management education is to foster effective leaders and to support them in their headteacher roles. Headteacher preparation is regarded in many countries as crucial aspect of school development and progression (Cowie & Crawford, 2009). School leadership plays a central role in the extent to which a school exhibits a culture of learning and professional behavior and whether there are integrated professional communities (Goldring, & Porter, & Murphy, & Elliott, & Cravens, 2009).

The scope of teachers' professional responsibilities is determined mainly by the following processes: administrative, personnel-related (recruitment and reorganisation of didactic vacancies), legal, financial, political (including state education policy) (Cooper et al., 2015). Expectations of school principals are often grounded in theoretical conceptions of leadership that compete with the day-to-day managerial functions associated with running a school. Good management requires consistency and assurance that daily operations will be handled fairly and expeditiously. It requires a systematic application of a variety of skills to ensure an orderly and efficient school environment (Ubben & Hughes, 1997 in Catano & Stronge, 2007).

Most often, the role of the headteacher is performed by a teacher who relates to a particular educational institution and has taught at the school for years. By gaining new competences in school management and leadership, the teachers are given a chance to change their professional roles (Eger, & Pisoňová, & Tomczyk, 2017). Educational leaders face unprecedented accountability pressures in what is clearly a 'results driven' business. As these environmental pressures intensify, leaders and managers require greater understanding, skills, and resilience to sustain their institutions (Adams & Muthiah, 2020). To support the development of programmes that would support the training of strong school leaders, a team of researchers from the Stanford School of Education conducted a nationwide study of models of pre-graduate and further education for headteachers (Pisoňová & Hašková, 2022).

Research has shown that the programmes provide the coherent curriculum based on theories and principles from school managers' practice; they have strengthened reform initiatives. Staff training in this area requires identification of those areas that need to be improved as well as special analysis of the catalogue of roles played by school managers. An in-depth analysis in this area determines further professionalising of the analysed occupation and emphasises the attractiveness of professional career in the school management sector (Alonderiene & Majauskaite, 2016; Clarke, 2015).

The instructional leadership role that principals adopt is essentially concerned with shaping and building a collaborative school culture, a key element required in managing curriculum changes (Mestry & Govindasamy, 2021). The aim of each organisation, school, is to install a headteacher who will enhance it (Kubeš et al., 2004). The ability to direct managerial action towards effective problem solving is an objective necessity for the functioning of an educational institution. Thus,

the key to this process is the personal and professional qualities of the manager, which establish optimal use of his skills and knowledge, which are implemented in the techniques of managerial activity (Shvardak, Bozhynskyi, Bozhynskyi, Kondratenko, Marchenko, 2021).

In accordance with the valid Act No. 138/2019 Coll. on pedagogical staff and professional staff and its amendment No. 414/2021 Coll., it is necessary to carry out managerial training in the professional development of Slovak education managers in the form of functional education or as part of bachelor's or master's studies focused on education management. The legislation introduces the institute of management portfolio as an output of functional education. The provider is the Methodology and Pedagogy Centre (an organisation established by the Ministry of Education); the Centre for Lifelong Learning of the Pedagogical Faculty of the Catholic University in Ružomberok and the Centre for Further Education of the Comenius University in Bratislava are the providers through lifelong learning and further professional education.

Lifelong learning consists of school education and further education following the level of education and acquisition of professional competences necessary for the performance of management activities (Pisoňová et al., 2017). The equivalent of functional education is provided by the Constantine the Philosopher University in Nitra by the accredited study programme Education Management and Public Administration, which replaces functional education. As a result of changes in accreditation criteria and practice requirements, since the academic year 2021/2022, it is possible to study at the bachelor level in the study programme Special Pedagogy, Pedagogy, Education Management and master level in the study programme Special Pedagogy, Social Pedagogy, Education Management.

### 3 METHODOLOGY

In the period prior to the application of the Act No. 138/2019 Coll. and the Decree No. 361/2019 Coll. on education in professional development, research on the level of managerial training for headteachers in the Slovak Republic and the Czech Republic was carried out. We are going to present data that directly corresponds to the focus of the paper.

*The main objective of the present study* was to analyse the educational needs of headteachers in the Slovak Republic and the Czech Republic with focus on all key areas. The main objective was specified to set the following *partial objectives*: to identify the level of content of functional education or completed managerial training in pedagogical management, economic management, legal management, school management, and project management.

Two anonymous questionnaires were used in the study: one for headteachers in the Slovak Republic and the other for headteachers in the Czech Republic. They contained 17 questions (open-ended and close-ended items with multiple choice questions, at the end, space was provided for comments from respondents on who could present their own observations and opinions on the issue) which were answered by 187 respondents, including 97 respondents from Slovakia and 90 respondents from the Czech Republic. The questionnaires are the same for both target groups, only the wording differs some issues due to the use of Czech terminology. We compared the schools in the research and then evaluated them.

### 4 INTERPRETATION OF STUDY RESULTS

The study focused on how school managers in the Slovak Republic and the Czech Republic were trained. Most often, in 89 respondents (92 %), the response was functional education. The legislation in force requires its completion to acquire the professional competences necessary for the performance of management activities. The study respondents were from the Methodology and Pedagogy Centre, lifelong education centres at universities, or those without relevant education acquired. In the Czech Republic, the respondents were from the National Institute for Further Education, the Charles University in Prague, the Palacký University Olomouc, from the Faculty of Arts of the Masaryk University in Brno.

Through the questionnaire, we wanted to find out whether the knowledge from the completed training was used by the respondents in their management practice. Up to 55 (57 %) Slovak and 65 (72%) Czech respondents used the acquired knowledge in their practice. In the responses of 34 (35 %) Slovak and 20 (22 %) Czech respondents, it was stated that they did not use the knowledge from the completed training in their

practice. The reason may be an inadequate level of the training provided. Eight (8 %) Slovak and five (6 %) Czech respondents were unable to comment on the question.

In another question, we sought respondents' views on the managerial training of headteachers. Only 34 (35%) Slovak respondents and 45 (50%) Czech respondents consider it sufficient. It is alarming that up to 40 (41%) Slovak headteachers and 38 (42%) Czech headteachers are not satisfied with the quality of the managerial training provided. The data presented show that Slovak respondents are not more satisfied with the level of managerial training compared to their colleagues from the Czech Republic. When marking this answer, they had respondents state the reason why they are preparing to serve as headteachers appears to be insufficient. The most common reasons were those of respondents associated with formalism, presenting only theoretical knowledge that was not under-represented.

Here are some of the claims: (SVK) *"Education is formally without interconnection of practice."; "It has no concept."; "There is no regular meeting of school heads."; "The headteacher has to study a lot of information himself, the practice is often different from the lectures.";* (CZ) *„Insufficient preparation in the field of economics, legal standards and human resources.“; „lacks more emphasis on managerial competencies to lead people.“; „functional study focuses little on teaching support system, career development plans, self-evaluation processes, etc.”* The question could not be commented on 23 (24%) Slovak and 7 (8%) Czech respondents.

Functional education, resp. managerial training of headteachers contains modules focused on the area of pedagogical management. Through this content, the headteacher should acquire knowledge focused on examples such as: creating a school work plan, creating a career plan for employees, creating employee evaluation criteria, methodological guidance for teachers and more. As many as 43 (44%) Slovak and 54 (60%) Czech respondents state that they received sufficient information in this area through training. As many as 39 (40%) Slovak and 28 (31%) Czech respondents stated that the information in the field of pedagogical management is insufficient. The main reasons given were the following: (SVK) *"At the time I completed my functional education, many things were not taken over yet."; "I didn't get the information to create the school's internal documents."; "I thought they would tell us something about how to involve parents in the school."; "I have a burnt-out teacher at school, but I can't help him.";* (CZ) *"I lacked information on staff development."; "Pedagogical management was only*

*a marginal topic."; "Education didn't do that at all."* 15 (15%) Slovak and 8 (9%) Czech respondents could not answer the question.

The headteachers should also have competences in the field of legal awareness, which are: orientation in the relevant school legislation, in the Labor Code, personal data protection (GDPR), etc. To the question of whether education provides respondents provided adequate information in the area of legal management as follows. For sufficient information in the area of legal proceedings through up to 48 (49%) Slovak and 53 (59%) Czech respondents consider the training of headteachers. 36 (37%) Slovak and 31 (34%) Czech respondents consider this information to be insufficient.

From the authentic testimonies of headteachers we selected the most frequently used statements: (SVK) *"It was just a read from the paper on the paragraphs, no application in practice."; "I was expecting something about the staff statements, the conditions of admission and the like."; "This information were stated only formally, given that they are constantly changing, is necessary additional training. ";* *"Practical examples were missing.";* (CZ) *"I received it in my opinion, I studied the basic information, a lot of materials and information alone from other sources."; "Yes, the basics and the rest I gained through practice and response legislative changes."; "There was a lack of orientation in the relevant legislation of an economic nature."; "It is too broad and complex area, we only touched on the basic concepts."* etc. 13 Slovak (13%) and 6 (7%) Czech respondents could not comment on the question.

In the following question, we found out whether the headteacher's training was completed provided respondents with sufficient information in the field of school management. Specifically, the following information: the school's strategic planning process, the creation and implementation of school strategy, organizational and time management, school marketing, decision-making acts of the principal, managerial ethics and more. Up to 50 (52%) Slovak and 46 (51%) Czech respondents consider sufficient information in the field of school management through the training of school principals.

The scope and quality of the presented topics in the field of school management were not satisfied by 37 (38%) Slovak and 38 (42%) Czech respondents. We also list some from specific statements: (SVK) *"It would help me advice on how to organize my work, but no one."; "There were no specifics control activities at school."; "I wanted to hear something about school promotion."; " In this practice taught me the most.";* (CZ) *"It was*

only marginally discussed."; "Most things I learned in further education and practice."; "There was a lack of strategic and action plans, their evaluation." etc. It was not possible to comment on this issue 10 (10%) Slovak and 6 (7%) Czech respondents.

The headteacher should also have the project management information, which are: information on available projects, creation of school development projects, identification of financial, personnel, material resources, creation and leadership of the project team and others. For sufficient information in the area project management through the training of school principals 30 (31%) Slovak and 35 (39%) Czech respondents. For insufficient considers information in this area to be 53 (55%) Slovak and 48 (53%) Czech respondents. Here are some of the most common reservations of a representative group of respondents: (SVK) "We didn't talk about the projects at all."; "The information in this area was marginal, I gained knowledge through self-study."; "This has not been said at all."; (CZ) "These topics were not on the agenda."; "The creation and management of the project team was missing."; "Project management was not part of the study."; "I supplemented my education at other seminars." "There were mini-projects at the time of the study and this issue was not addressed at that time." etc. Surprisingly, up to 14 (14%) Slovak and 7 (8%) Czech respondents could not answer the question.

Economic management and leadership are areas of management from the managerial training for headteachers in which the most significant perceived negative statements of graduates were detected. Headteacher should through functional education, respectively managerial preparation for the acquisition of the following competencies: financial planning, managerial accounting, budgeting, public procurement, business activities of the school, obtaining funds from extra-budgetary sources, etc. When asked respondents answered the following whether the training provides sufficient information in the field of economic management, from Slovakia 37 (38%) respondents consider information in this area to be sufficient, from the Czech Republic it is 45 (50%) respondents. As many as 45 (51%) Slovak and 41 (46%) Czech respondents identified the information in the field of economic management as insufficient.

Listed respondents consider part of the management process to be sufficient to lead people for the following reasons: (SVK) "This topic was absent."; "He lacked model situations, real outputs"; "I thought they'd tell me how to check my accountant so he wouldn't get me down."; "I wanted to know more about school budgeting."; "Everything was missing, I gained the knowledge through practice"; (CZ) "Given that that the headteacher does not

have an economic education, the course is only such an "insight" into this area. "; "No, she provided the information, but only informative. There was no connection with the practice."; "It's very extensive, it would need to be separate lecture block."; "Economic governance has generally received insufficient attention."; "It was not focused on the activities of the headteacher, but on the activities of an economist." 11 (11%) Slovak respondents could not comment on this issue and 4 (4%) Czech respondents could not comment on this issue.

The second very important area of management, leadership, is area in which the most significant perceived negative statements of graduates were detected. The headteachers should have the following skills in this area: to identify and resolve conflicts in the workplace, to create effective work teams, apply adequate motivational strategies, self-presentation in the media and in contact with the public and others. Information from this area is considered sufficient by 47 (48%) Slovak respondents and 58 (64%) their Czech colleagues. He identified this as insufficient information in this area possibility of up to 39 (40%) Slovak and 27 (30%) Czech headteachers.

To illustrate, we also present some specific statements of this target group: (SVK) "This one we have only partially addressed this area, it would be necessary to take this area deeper and especially more practically."; " We have done very little with these issues, almost at all."; "I needed to know something."; "I have little information about that."; "Almost everything was missing."; (CZ) "These were theoretical models that are not realistic in practice, mainly due to time and money."; "There are no examples, ideas from this area."; " It was torn apart from reality."; " Almost everything was missing. That's why I signed up for The Director Live, helping myself by sharing with experienced directors." 11 (11%) Slovak and 5 (6%) Czech could not answer the question respondents

## 5 RECOMMENDATIONS ON IMPROVEMENT OF THE MANAGERIAL TRAINING STATED BY THE SLOVAK AND CZECH RESPONDENTS

The results refer to functional education as a whole.



**Table 1: Recommendations by the Slovak respondents**

Recommendations by the respondents	n	%
Include more examples from practice in the training (model situations)	33	34 %
Nothing	15	15 %
Focus the training on individual areas of management in a greater extent	14	14 %
I do not know	10	10 %
Much of the curriculum needs to be changed	8	8 %
Stricter conditions for obtaining education	5	5 %
Include more "examples of good practice" in the training	5	5 %
The training should be provided by better practitioners	4	4 %
The training should be cancelled	3	3 %
<b>Total</b>	<b>97</b>	<b>100 %</b>

Source: Pisonová in Pisonová et al. (2021, p. 254)

Through the above-mentioned open item of the questionnaire, we are with the respondents find out their recommendations for improving functional education (or completed management training). As many as 33 (34%) Slovak respondents stated that the training should contain less theory and more examples from practice. Fifteen (15 %) respondents considered the training to be sufficient. According to the respondents' statements, there was a lack of information on economic management. Fourteen (14 %) respondents were unable to answer the question. The recommendation to change everything was stated by eight (8 %) respondents. Stricter conditions for obtaining education were recommended by five (5 %) respondents. Five (5 %) respondents stated the request for mutual exchange of experiences among headteachers. Four of them (4%) stated that the training should be provided by practitioners; and three (3%) respondents suggested to cancel the training completely.

Finally here are results with some of the authentic statements: *"Less theory and more connection to practice."*; *"Strengthening the strengths of education and eliminating weaknesses."*; *"I would introduce solutions to specific practical situations into my education."* *"Not only to take over theory, but I would add practical exercises: workshops, creative activities, demonstrations ..."*; *"Less theory, more practice, for example, not talking so much about decisions, but being able to make them out of legislation. Show what it should look like e.g. the concept of the school for x years, how the SWOT analysis of the school is done, that is, examples from practice. Everyone can study the legislation."*

*"I would introduce less theory and more real knowledge than dealing with funding, making curriculum plans, and obtaining extra-budgetary resources, as most schools are particularly concerned about funding and, of course, constant bureaucracy."* etc.

Fifteen (15%) respondents consider the current education to be sufficient and would not change anything about it. These respondents stated that the content and implementation of functional education suited them. Another recommendation is to focus education on individual areas of management. According to the respondents, the area of economic management is most missing. We make the following statements: *"To supplement at least partially the areas of management mentioned in the previous questions of the questionnaire."*; *"I would include more information in the area of economic management."* *"More from school economics."* etc. 14 (14%) respondents could not answer the question. Another recommendation is *"Change a lot / everything."* This is how 8 (8%) respondents answered. In this context, we make the following statements: *"Everything should be set up differently. Functional training gave me nothing."*; *"Everything needs to change. I think that the new school law on functional education is already addressing this in expanding modules."* etc. Stricter conditions for obtaining education were recommended by 5 (5%) respondents.

The requirement for mutual exchange of experiences between directors was also mentioned by 5 (5%) headteachers. Four of them (4%) state that training should be provided by practitioners: *"Practitioners should teach, not officials."*; *"People who are far away from practice often teach. They have studied only laws, decrees, but their direct application, respectively. They did not know how to solve a problem."*; *"School principals with many years of experience should be educated."*; *"I would welcome practitioners for individual modules."* etc. The last recommendation is to cancel the training, which was stated by three respondents (3%) of the total number.

**Table 2: Recommendations by the Czech respondents**

Recommendations by the respondents	n	%
Nothing	25	28 %
More examples from practice (model situations)	24	27 %
University education focused on school management	11	12 %
I do not know	9	10 %
Focus the training on individual areas of management in a greater extent	7	8 %
The training should be provided by practitioners	6	7 %
Implementation of Manager Shadowing	4	4 %
Include the mutual exchange of experiences among headteachers in the training	2	2 %
Cancel the training	2	2 %
<b>Total</b>	<b>90</b>	<b>100 %</b>

Source: PISOŇOVÁ in PISOŇOVÁ et al. (2021, p. 256)

Headteachers from the Czech Republic state that up to 25 (28%) of them are satisfied with the current education and would not change anything about its content. Like the Slovak respondents, the Czech respondents also answered and up to 24 (27%) recommended the introduction of practical exercises in education, resp. link with practice: *"I would add more practical information, I would involve experts from practice."*; *"Theoretically, the preparation was sufficient, the practical part was insufficient."*; *"Introduction to examples of good practice, excursions to exemplary schools."* etc. Another recommendation is a university degree focused on school management. This option was recommended by 11 (12%) respondents: *„Given that the headteacher often has to delegate some activities to his deputies, I recommend that they also be required to study at least at the level of Bc. studies."*; *"Subject in college - keep school management for all future teachers."*; *"The condition should be the stage of the university's school management."* etc. 9 (10%) respondents could not comment on the question.

Other respondents suggest focusing education on individual areas of management. 7 (8%) respondents answered: *"I would add everything about leadership, support, mentoring, more to deal with teaching, what the student will take away from school, the meaning of teaching and learning, the impact on teaching"*; *"More hours, deepening knowledge of the economic area of the school."*; *"One-day occasional seminars with new information on the areas of management concerned."*; *„Focus more on project management,*

*burnout prevention. leadership, etc."*; *"Pay attention to legal norms of economic character in school practice."* etc. Another piece of advice aimed at improving managerial training is the training provided by practitioners. 6 (7%) respondents identified this option: *"Greater emphasis on experience with experienced directors."*; *"50% of the studies must be led by the principals of successful practice schools."*; *"Training would be provided by practitioners."* etc.

The so-called 4 (4%) respondents stated: *"More mandatory shadowing - practice with an experienced colleague at a similar type of school."* etc. The exchange of experiences with school principals was mentioned by 2 (2%) respondents: *"Access and exchange of experience, opportunity to work with successful headteachers."*. 2 (2%) respondents are in favor of canceling the training of school principals. Given that 4 respondents expressed the requirement to apply the method of shadowing in the management training, we state that the so-called. Manager shadowing does not yet have a generally accepted definition. It is a method that provides "shadowing" managers with the opportunity to know their job, abilities, management methods, and thus gain more information about their managerial competencies.

The scientific study is part of the KEGA project No. 066UK-4/2021 Electronic Support for Pre-Graduate Training for Teacher Students in Class Management – Creation of Web Portal and University Textbook.



## References

- Adams, D., & Muthiah, V. (2020). School principals and 21st century leadership challenges: a systematic review. *Journal of Nusantara Studies (JONUS)*, 5(1), 189-210.
- Alonderiene, R., & Majauskaite, M. (2016). Leadership style and job satisfaction in higher education institutions. *International Journal of Educational Management*, Vol. 30, No. 1, pp.140–164.
- Catano, N., & Stronge, J. H. (2007). What do we expect of school principals? Congruence between principal evaluation and performance standards, *International Journal of Leadership in Education*, 10:4, 379-399.
- Clarke, S. (2015). School leadership in turbulent times and the value of negative capability. *Professional Development in Education*, Vol. 42, No. 1, pp. 5–18.
- Cooper, K.S., Stanulis, R.N., Brondyk, S.K., Hamilton, E.R., Macaluso, M. & Meier, J.A. (2015). The teacher leadership process: attempting change within embedded systems. *Journal of Educational Change*, Vol. 17, No. 1, pp. 85-113.
- Cowie, M. & Crawford, M. (2009). Headteacher preparation programmes in England and Scotland: do they make a difference for the first-year head? *School Leadership and Management*, Vol. 29, No. 1, pp. 5–21.
- Eger, L., Pisoňová, M. & Tomczyk, L. (2017). Development programs for head teachers in four Central European countries: an international comparison. *Management in Education*, vo. 11, no.1.2017.
- Goldring, E., Porter, A., Murphy, J., Elliott, S. N., & Cravens, X. (2009). Assessing Learning-Centered Leadership: Connections to Research, Professional Standards, and Current Practices. *Leadership and Policy in Schools*, 8:1, 1-36, DOI: 10.1080/15700760802014951
- Kubeš, M., Spillerová, D. & Kurnický, R. (2004). *Manažerské kompetence. Způsobilosti vyjíměčných manažerů*. Praha: Grada.
- Lopukhina, T.V. & Stiahunova, O.O. (2021). Professional Development of the Head of an Educational Institution Within the Postgraduate Education System. *Journal of Higher Education Theory and Practice*, Open Access Volume 21, Issue 14, Pages 170 ISSN 21583595, doi: 10.33423/jhetp.v21i14.4819
- Malejčík, A. (2006). *Základy manažmentu*. Nitra: SPU.
- Pisoňová, M. (2017). Implementation of motivational strategies between head teachers and foreign language teachers. In *Journal of Language and the Cultural Education*. vol. 5, no. 1, (2017), pp. 127-144. doi: 10.1515/jolace-2017-0008.
- Mestry, R. & Govindasamy, V. (2021). The Perceptions of School Management Teams and Teachers of the Principal's Instructional Leadership Role in Managing Curriculum Changes. *Interchange*. 52:545–560 <https://doi.org/10.1007/s10780-021-09425-5>.
- Pisoňová, M. et al. (2021). *Manažment vzdelávania Teoretické, empirické a praxeologické aspekty riadenia vzdelávacích inštitúcií*. Bratislava: Wolters Kluwer.
- Pisoňová, M. & Hašková, A. (2022). *Challenges and pitfalls of efforts to design tertiary study programs for school leaders*. Progress in Education.
- Shaked, H. & Schechter, Ch. (2017). *Systems thinking for school leaders holistic leadership for excellence in education*. Springer International Publishing.
- Shvardak, M., Bozhynskyi, N., Bozhynskyi, B., Kondratenko, N., & Marchenko, H. (2021). Features of Management Decisions by the Head of an Educational Institution, Their Assessment in the Conditions of Crisis. *Journal of Higher Education Theory and Practice*, 21(14). <https://doi-org-158ybles00080.hanproxy.cvtisr.sk/10.33423/jhetp.v21i14.4816>
- Sedlák, M. 2008. *Základy manažmentu*. Bratislava: Iura Edition.
- Veber, J. et. al. (2009). *Management: základy, moderní manažerské přístupy, výkonnost a prosperita*. Praha: Management Press.
- Act No. 138/2019 Coll. On Pedagogical Employees and Professional Employees [cit. 2022-01-10]. Available on: <https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2019/138/20191015>
- Act No. 414/2021 Coll. On Pedagogical Employees and Professional Employees [cit. 2022-01-10]. Available on: <https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2021/414/20220101>

#### Contact details:

Prof. Mária Pisoňová, PhD.  
Department of Pedagogy  
Faculty of Education  
Constantine the Philosopher University in Nitra  
Dražovská cesta 4  
949 74 Nitra, SLOVAKIA  
E-mail: mpisonova@ukf.sk

Mgr. Mária Pappová  
Department of Pedagogy  
Faculty of Education  
Constantine the Philosopher University in Nitra  
Dražovská cesta 4  
949 74 Nitra, SLOVAKIA  
E-mail: mpappova@ukf.student.sk

---

## HIGHER EDUCATION TEACHER – PROFESSIONAL IDENTITY AND ANDRAGOGICAL COMPETENCIES IN THE CONTEXT OF PROFESSIONAL DEVELOPMENT

---

Miroslav Krystoň, Nikola Gumanová, Zuzana Gredecká

#### Abstract:

The quality of universities is at the fore of national discussions. And the university teachers are the bearers of this quality of education. We turn our attention to the relatively unexplored area of university teachers acting in andragogical situations in this given context. The study provides the results of two quantitative types of research, and the first focused on andragogical competencies, the second focused on the professional identity of university teachers.

#### Key words:

university teacher, andragogical competencies, professional identity, professional roles, professional development

## 1 INTRODUCTION

The teacher is at the heart of the educational process. The quality of universities is often directly linked to the level of his/her competencies, which can put intense pressure on him/her.

Researchers (Derling et al., 2019) draw attention to the need to update and innovate the andragogical profile of higher education teachers (HET) based on the needs of the ongoing transformation processes confronting higher educational institutions with the challenges of rapidly changing advances in science, the dynamic nature of globalization, the impact of the massification of higher education and the knowledge-based society.

In connection with changes in higher education, Vašutová (2005) underlines the importance of the pedagogical education of HET. However, in general, pedagogical knowledge or educational activity has not been accentuated in recent years. A great deal of emphasis is currently placed on research, science, and competencies associated with it.

The emphasis on scientific activity can result in a lack of time for other academic duties, so many see their obligation to learn as a lower priority. Kravčáková et al. (2011) claim that due to the university's pressure on the scientific activities of its employees, teaching has become of second priority, excluded from teachers' evaluation.

Japanese scholars Yoshimoto, Inenaga and Yamada (2007) discuss intertwining approaches of pedagogy and andragogy as a key determinant of the changing professional role of a university teacher. This poses a question on the essence of transforming the traditional pedagogical role of a university teacher into a professional role of an adult educator, applying andragogical educational approaches.

## 1.1 Research Problem

Many researchers (Beijaard et al., 2004; Day et al., 2005; Lasky, 2005) consider professional identity (PI) to be the critical factor in the professional development of HET. Therefore, we must consider this if we are to improve the professional competencies of HET.

Because of the growing share of the adult population in education and the diverse age of students, it is questionable how the HETs reflect students' changing educational needs and adapt educational approaches to those relevant for adult education. The legislative definition of qualifications for fresh HET is, in our opinion, another challenge. There is no requirement for pedagogical education or related andragogical competencies (AC). Taking these findings into account, the question remains if current HETs have pedagogical education, whether they feel the need to educate themselves in the domain of university pedagogy at all, and if existing differences are determined by faculties or place of work or their position?

The PI of HET may be in conflict due to accreditation changes, expectations of publishing or innovating, and not very favorable working conditions. Therefore,

we have decided to examine this unexplored area and answer questions about constructing the academic identity of HET with regard to diverse variables, including age and professional position. Although, in terms of age and position, Kravčáková et al. (2011) claims that the self-evaluation of teachers increases with age, while the lowest self-evaluation could be found in doctoral students and the highest in professors, results of the identity diffusion indicator showed that doctoral students achieved similar values as associate professors and professors, with teaching assistants scoring the lowest. On the other hand, the identity conflict drops after reaching a significant position (academic ranking) and experiencing the successful management of grants (Kravčáková et al., 2011).

On the issue of competence assessment, we support the claim of Žeravíková (2015, p. 121), considering the answer to the question "what kind of competencies should those professionally engaged in the development of adult competencies possess" to be of importance.

## 1.2 Research Questions and Hypothesis

RQ1: What are the gender-based and position-based differences in the level of achieved AC?

RQ2: What is the correlation between an achieved level of AC and age, years of experience, and completed (pedagogical) education of HETs?

RH1: We presume the global identity indicator of self-evaluation to grow as a higher position (academic ranking) is achieved.

RH2: We presume the teaching assistants will have the least stable identity.

RQ3: What is the difference in assessment between aspirational "me" entities (Me – as I would like to be as a researcher; "me" – as I would like to be as a teacher) depending on my position?

## 2 METHODS

Our research sample consisted of HETs, selected based on convenience sampling in the research:

- a) N = 50, participants are working at the pedagogical faculties of UMB universities in Banská Bystrica, UPJŠ in Košice, and at UNIPO in Prešov.
- b) N = 40, participants of all faculties of the UMB in Banská Bystrica.

We analyse the AC of HET by the measuring tool initiated by the American Research Institute to promote the quality of educators in the United States under the competency model Adult Education Teacher Competencies (2015). It is an open research tool originally designed for self-assessment. The questionnaire consists of 4 dimensions: data-based monitoring and managing learning performance of students (D1); data-based planning and implementation of quality education (D2); efficient communication aimed at motivation and students' involvement (D3); professional development and on-going learning (D4).

The PI of HET was determined using the IDEX methodology (IDentity EXploration). IDEX is a computer program used to analyze the identity of individuals or groups (Weinreich et al., 1991). The program allows for the creation of an instrument tailored to specific needs. When creating it, we drew on Kravčáková, Lukáčová and Búgelová (2011). The computer program works with the results, and its output are global identity indicators (self-evaluation and identity diffusion) and individual identity indicators.

### 3 RESULTS

We processed the data in the SPSS statistical program. We used statistical procedures of comparative analysis using the Mann-Whitney U-test for two independent selections in gender comparisons and aspirations. We used the Kruskal-Wallis analysis of variance to determine the differences in the assessment of the self-entities depending on their positions. We determined the relationship between the variables using Spearman's correlation analysis. The results are assessed at a level of significance < 0.05.

We focused on comparing four dimensions in relation to gender (Table 1) and the position (academic ranking) of HETs. Women achieved a significantly higher level of competence solely in D2 compared to men. However, we may conclude that women always scored slightly higher than men, given the median values. The results

further pointed out no statistically significant difference in the achieved level of AC within individual dimensions among teaching assistants, associate professors, and professors.

**Table 1: Comparison: Gender-based Results in the Individual Dimensions**

Mann-Whitney U-test	Gender	N	Median	SD	Z	p
D1	M	22	7.42	1.24	1.70	0.08
	F	28	8.03	1.31		
D2	M	22	7.86	1.13	2.59	0.01
	F	28	8.47	0.69		
D3	M	22	8.04	1.17	0.72	0.46
	F	28	8.54	0.93		
D4	M	22	7.11	1.23	1.42	0.15
	F	28	7.92	1.20		

Legend: N= number of participants, SD= standard deviation, Z= test result, p=significance value

Further, we wanted to identify the relationship between the achieved level of AC and age, years of practice, and completed (pedagogical) education of HETs (Table 2). Statistically, a significant relationship was demonstrated solely within the second and third dimensions and the age of HETs. We may conclude that the level of competencies related to the D3 and D4 increased with the age of HETs. Average values by dimension depending upon completed (pedagogical) education indicated that HETs with a non-pedagogical background achieved the lowest level of AC across all four dimensions. Conversely, HETs with pedagogical education who also attended supplementary education in pedagogy achieved the highest average level. However, the differences among the groups were not significant.

**Table 2: Resulting Values – Correlation Analysis**

Spearman's correlation analysis	Age	Practical experience (in years)	(Pedagogical) Education
D1	$r=0.14$ $p=0.33$	$r=-0.09$ $p=0.51$	$r=0.17$ $p=0.23$
D2	$r=0.03$ $p=0.83$	$r=-0.20$ $p=0.15$	$r=0.00$ $p=0.96$
D3	<b><math>r=0.33</math></b> <b><math>p=0.01</math></b>	$r=0.13$ $p=0.36$	$r=-0.09$ $p=0.52$
D4	<b><math>r=0.31</math></b> <b><math>p=0.02</math></b>	$r=-0.05$ $p=0.72$	$r=0.18$ $p=0.21$

Legend:  $r$ = correlation coefficient.  $p$ =significance value

Table 3 presents the results of a correlation analysis that shows a statistically significant positive correlation between functional position and self-evaluation. As a result, we accept hypothesis no.1, concluding that self-evaluation of our participants grows with the functional position.

**Table 3: Correlation Between Position and Identity Indicators**

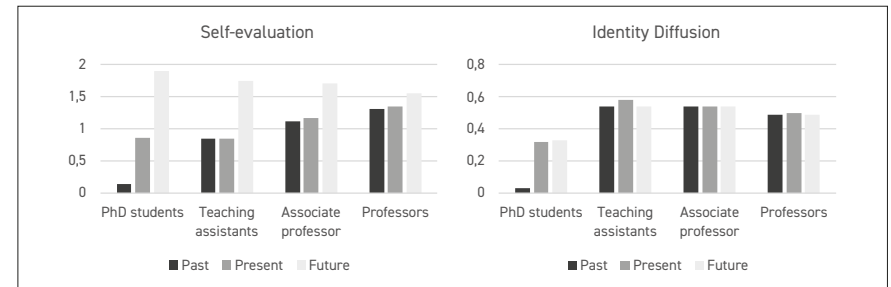
Spearman's correlation analysis	ID	SE	Evaluation of others
Position	$r=0.45$ $p=0.78$	<b><math>r=0.33</math></b> <b><math>p=0.03</math></b>	$r=0.12$ $p=0.44$

Legend:  $r$ = correlation coefficient.  $p$ =significance value

Graphs 1 and 2 present position-based changes in self-evaluation and identity diffusion over time. The comparison of identity diffusion and self-evaluation in the table clearly shows that PhD students and teaching assistants struggle with the biggest challenges in identity stability (low self-evaluation and the highest identity diffusion in teaching assistants and low Self-evaluation and the lowest identity diffusion in doctoral students).

Contrary to the theory teaching assistants have the least stable PI, our results do not show currently existing problems in their PI. However, they can be observed in doctoral students (low identity diffusion). Thus, hypothesis number 2 is rejected, concluding that the least stable identity can be observed in doctoral students based on the self-evaluation indicator.

**Graph 1: Self-evaluation Over Time Graph 2: Identity Diffusion Over Time**



Self-evaluation increases with age, and the ideal “Me” is the highest in doctoral students. We take a positive view of the fact that all groups move towards “the goal”, i.e. their past “me” is lower than their ideal “me”. However, doctoral students’ very low identity diffusion level is of concern. The last research question focused on the occupational aspirations of HETs, depending on whether it was research or teaching. Comparing those “me” entities has conveyed a statistically significant difference in favour of research. Therefore, we conclude that participants in our study assess their ideal “me” in research higher than in teaching.

**Table 4: Comparison of Self-evaluation Results in Research**

Mann-Whitney U-test	Aspirations	Median	SD	Z	p
Self-evaluation	Aspirations research	0.92	0.09	2.54	0.01
	Aspirations teaching	0.83	0.16		

Legend: SD= standard deviation, Z= test result,  $p$ =significance value

## 4 DISCUSSION

We would like to state that the measurements we have carried out are partial outputs from broader research, which will be further verified.

The first objective of our research was to analyse gender-based differences in the level of achieved AC. The results of research by Islahi a Nasreen (2013, in Al-Bulushi, Al-Said and Lietzén, 2021), along with our results, point to the fact that women in

academia, compared to men, achieve higher levels of AC related to direct pedagogical work. The justification of the results is based on a claim that women emphasize the ability of thinking in a higher order, with active and collaborative learning, and they use more diverse teaching methods and approaches in working with adults. Furthermore, regarding gender differences, research shows that both women and men achieved the highest level of competence in the dimension of effective communication aimed at students' motivation and engagement, scoring significantly higher than in competencies related to monitoring and management of students' learning performance, professional development and continuous education.

The results of our second objective demonstrating a correlation between higher age and the level of competence to communicate effectively, motivate and involve students, and competencies to professionally grow and continuously learn can be assessed positively. However, this trend was not confirmed among those with longer practical experience, which came as an unpleasant surprise.

However, since the research sample consisted of HETs of pedagogical faculties, it came as an interesting finding that 24 percent of them did not have pedagogical education, while 16 percent of all participants neither had pedagogical education nor received any other supplementary education in the form of training or courses on university pedagogies. This could have been observed at their level of competencies related to professional development and continuous learning with the lowest average score of all four dimensions. Interestingly enough, on average, the HETs without pedagogical education or training were less interested to professionally grow than HETs with pedagogical background. Kravčáková et al. (2011) attributes this phenomenon to a weak identity of HET, who lack sufficient motivation to grow, primarily since they are not identified with their position. In this context, we find it interesting to further explore the reasons why some HETs are not interested in developing knowledge in the domain of university pedagogies.

Our first hypothesis, we draw on the work of Kravčáková et al. (2011) that mentions significantly increasing self-evaluation in relation to a job assignment (a position/academic ranking in our case). This hypothesis was confirmed, but another hypothesis - that the teaching assistants would have the least stable PI was not confirmed. Doctoral students reported the least stable PI. The identity diffusion of other groups (expert assistants, associate professors) reached mean values, but the identity diffusion of doctoral students showed excessively low values. The

follow-up data comparison of the PI of doctoral students with teaching assistants reveals concerning observations.

Doctoral students show the minimal level of identity diffusion, i.e. they cannot realistically assess and differentiate their good or bad characteristics, or even those of others. Erikson defined this condition as a state of prematurely closed identity. Marcia (1966) describes this condition as a steady, firm commitment made without an identity crisis. Their aspirational "me" (see Table 4 is the highest) achieved identity levels that fall within the category of defensive, highly confident identity, where the individual achieves a low level of identity diffusion, but at the same time a high level of self-assessment, thereby adopting a defence mechanism against the world. Thus, we may conclude that doctoral students in our sample are in a state of closed identity, which we consider to be an undesirable condition, requiring intervention by their supervisor/trainer who would help them deal with their conflicting identifications while providing them with a realistic view on their possible performances.

Since it is the low level of identity diffusion associated with high self-evaluation that suggests that one has excessive expectations from their future performances, Clark et al. (1996) describe behaviour full of work enthusiasm and high expectations as typical for young employees, with growing practical experience, however, the illusions vanish, while one is confronted with the reality that may be in stark difference to one's original ideas, potentially leading to the risk of leaving the profession. This phenomenon can also be observed in teaching assistants – nowadays, their self-assessments are decreasing when compared to the past, while identity diffusion has increased (See Graphs 1 and 2).

Fitzmaurice (2013), in his study, notes that the environment influences identity building in young scholars since they need to achieve good results and be appreciated by the group. Appreciation by the group, which, in the current university environment, is assessed mainly based on publications and, simultaneously, the qualification growth-focused only on demonstrating scientific and research competencies (Janoušková, 2012) is likely to result in a statistically significant difference in aspirations of "me" entities in favour of the scientific and research aspirations. Academia already has its own name for this phenomenon - publish or perish, which inherently contains the pressure on the publishing activities of HETs - to publish a lot and often. The HETs as individuals or, subsequently, their faculty are assessed by the number of publications, their impact, or References (Trnka, 2020).



## 5 CONCLUSION

The research results presented in this monograph also show that university teachers associate their self-evaluation and evaluation of their colleagues with scientific and research activities rather than pedagogical activities. This can also be observed in their lesser interest in education aimed at developing pedagogical or andragogical competencies.

## References

- Adult Education Teacher Competencies. (2015). Dostupné z <https://lincs.ed.gov/publications/te/competencies.pdf>
- Al-Bulushi, M., Al-Said, S. & Lietzén, O. (2021). Teacher Competencies in Oman: How Gender and Teaching Experience are Associated with Self-Assessment. *Athens Journal of Humanities & Arts*, <https://doi.org/10.30958/ajha.9-1-4>.
- Beijaard, D., Meijer, P. C. & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education*, 20(2), 107–128. <https://doi.org/10.1016/j.tate.2003.07.001>.
- Clark, A., Oswald, A. & Warr, P. (1994). Is Job Satisfaction U-shaped in Age? *Journal of Occupational and Organizational Psychology*, 69.
- Day, C., Elliot, B. & Kington, A. (2005). Reform, standards and teacher identity: Challenges of sustaining commitment. *Teaching and Teacher Education*, 21(5), 563–577. <https://doi.org/10.1016/j.tate.2005.03.001>.
- Derling, M., Magda, C., Mercedes, N., Edith L. & Max, O. (2019). Andragogical profile of the exemplary university professor for strengthening his or her educational practice. *Invention Journal of Research Technology in Engineering & Management (IJRTEM)*, 3(1), 11– 22.
- Fitzmaurice, M. (2013). Constructing professional identity as a new academic: a moral endeavour *Studies in Higher Education*, 38(4). 613– 622. <https://doi.org/10.1080/03075079.2011.594501>.
- Janoušková, L. (2012). Tvorba kurikula kurzu vysokoškolskej pedagogiky pre vysokoškolských učiteľov. *Edukácia človeka – problémy a výzvy pre 21. storočie – zborník z vedeckej konferencie*. Prešov: Prešovská univerzita v Prešove, 304-313.
- Kravčáková, G., Lukáčová, J. & Búgelová, T. (2012). *Práca a kariéra vysokoškolského učiteľa*.
- Lasky, S. (2005). A sociocultural approach to understanding teacher identity, agency and professional vulnerability in a context of secondary school reform. *Teaching and Teacher Education*, 21(8), 899–916. <https://doi.org/10.1016/j.tate.2005.06.003>.
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, 3(5), 551–558. <https://doi.org/10.1037/h0023281>

Trnka, A. (2021). Publish or perish? – alebo o etike publikovania vedeckých prác. *Aktuálne teoretické a výskumné otázky pedagogiky v konceptoch dizertačných prác doktorandov*. 47-55.

Vašutová, J. (2005). *Pedagogické vzdelávání vysokoškolských učitelů jako aktuální potřeba*. Aula, 13(3), 73-78.

Yoshimoto, K., Inenaga, Y. & Yamada, H. (2007). Pedagogy and Andragogy in Higher Education – A Comparison between Germany, the UK and Japan. *European Journal of Education*, 2007. 42(1), 75–98. <https://doi.org/10.1111/j.1465-3435.2007.00289.x>.

Žeravíková, I. (2015). Kompetenčný model lektora. In: KRYSTOŇ, M., PRUSÁKOVÁ, V. eds. *Andragogický rozvoj lektora*. Banská Bystrica: Publishing House UMB - Belianum, pp. 113-145.

#### Contact details:

prof. PaedDr. Miroslav Krystoň, CSc.  
Katedra pedagogiky a andragogiky  
Pedagogická fakulta, Univerzita Mateja Bela v Banskej Bystrici  
Ružová 13  
974 11 Banská Bystrica, SLOVAKIA  
E-mail: miroslav.kryston@umb.sk

Mgr. Nikola Gumanová  
Katedra pedagogiky a andragogiky  
Pedagogická fakulta, Univerzita Mateja Bela v Banskej Bystrici  
Ružová 13  
974 11 Banská Bystrica, SLOVAKIA  
E-mail: nikola.gumanova@umb.sk

Mgr. Zuzana Gredecká  
Katedra pedagogiky a andragogiky  
Pedagogická fakulta  
Univerzita Mateja Bela v Banskej Bystrici  
Ružová 13  
974 11 Banská Bystrica, SLOVAKIA  
E-mail: zuzana.gredecka@umb.sk

## KNOWLEDGE TRANSFER AS A TOOL FOR PROFESSIONAL DEVELOPMENT OF LEADING PEDAGOGICAL STAFF

Eva Urbanová, Jana Marie Šafránková

#### Abstract:

The aim of this paper was to investigate the possible ways of transferring selected work activities of a departmental high school principal to students of the School Management program in management practices and to compare the differences between the ways of transferring explicit and tacit knowledge. Research Question: In what ways can the explicit and tacit knowledge of experienced principals be transferred to novice principals at a management practicum so that they can use it effectively in their own practice? The results of the investigation showed that the most common way of transferring explicit knowledge is through a document template and the most common way of transferring tacit knowledge is through interpretation.

#### Key words:

school principal, departmental high school, management practice, transfer, explicit knowledge, tacit knowledge

## 1 INTRODUCTION

At the beginning of the 21st century, the training of future educational leaders, especially school principals, emphasizes the connection between theoretical knowledge and practical experience. Given the high autonomy of schools in the Czech Republic, their principals must possess knowledge and competences that cannot be acquired solely through education at the theoretical level. The performance of a school principals work activities and competences is based on his or her experience, knowledge, character traits, attitudes and skills. Knowledge has become an important part of all organisations and determines their success or failure.

Aspiring school principals are expected to have the same knowledge as their predecessors. Preparation for the role of school principal should include reflecting on the experiences of existing school principals in an authentic school setting to evaluate different situations and set up options to address them through feedback. Ways should be sought to transfer explicit and tacit knowledge from more experienced school principals to those starting out, using elements of experiential reflective learning.

The Department of Andragogy and Educational Management of the Faculty of Education of Charles University helps current and future school managers on the way to their professionalisation by, among other things, linking the theoretical knowledge gained in lectures with the knowledge and experience of the department's secondary school principals through management practice in the Management in Practice course in the School Management programme. The transfer of the experience of departmental secondary school principals to students, the sharing of good practice and the analysis of current educational issues provide a solid foundation for the challenging journey of the Czech school principal.

The aim was to identify possible ways of transferring selected work activities of departmental high school principals to students in management practice and to compare the differences between the ways of transferring explicit and tacit knowledge.

## 2 THEORETICAL FRAMEWORK

The demands of 21st century education require a change in traditional models of school management and leadership and professional growth for teachers. (Contreras, 2016) School principals are an important element in this change because they make a major contribution to the functioning and performance of schools. (Hancock et al, 2019) The roles that school principals perform are more managerial than true leadership roles. As a result, the expected managerial performance of principals inevitably has specific implications for educational leadership training. (Heystek, 2007) School principals are no longer only expected to be good managers but should also be effective educational leaders in the context of technological developments, social change, innovation, migration and globalization. In Europe and many other

countries around the world, principals are exposed to high expectations for educational outcomes. (OECD, 2009; Pont, Nusche & Moorman, 2008)

Finding ways to transform schools into effective learning environments is a key element of school management for both principals and other educational leaders. (Ganon-Shilon & Schechter, 2016) Effective school leadership and management is a key factor in achieving high levels of student achievement and school improvement. The prerequisite for an effective and successful school is a capable manager with management knowledge. (Edoun, 2011) The five areas of effective management include instructional leadership, cultural leadership, strategic leadership, educational management leadership and organizational management leadership. (Piaw et al, 2014) There are two approaches to effective school management - information sharing and collaborative discussion. (Abrahamsen, Aas & Hellekjær, 2015) The competence and experience of school principals and other school leaders is important not only for education but also for collaboration, decision-making and problem solving. (Kelly, 2004). The principal should work with others to implement the vision into the structures and processes of the school, which requires technical and people skills, conceptualisation and planning. (Bush & Glover, 2003)

Knowledge has become an important part of all organizations, determining their success or failure, and its management depends on technological development. (Drucker, 2000) Knowledge is most commonly classified into explicit and tacit. Explicit knowledge is associated with know-what and can be expressed in formal language (e.g. documents). Tacit knowledge is generally considered as "know-how" that exists only in people's minds and is not created in any tangible form. They are created by the interaction of an individual's explicit knowledge and experience, skills, intuition, personal ideas, mental models, etc. (Armstrong & Taylor, 2015; Gamble, 2020; Mládková, 2005)

The management, development, sharing and use of knowledge within an organisation is the basis for the organisation's competitiveness. The transfer of knowledge involves changing its initial (input) form into its final (output) form. The speed of information transfer and the communication and technological advances of today have greatly increased the need to convert tacit knowledge into explicit knowledge and vice versa. Transfer at the individual level refers to the way in which knowledge acquired in one situation is (or is not) applied in another situation. Experts believe that knowledge and the degree to which it is available are the main factors that

distinguish the 21st century from those of the past. (Argote & Ingram, 2000; Sohrabi & Naghavi, 2014)

Expertise is developed through learning by doing. Even the most gifted must almost always practice under the guidance of a more experienced teacher. Experts apply their knowledge by using their years of experience in a variety of situations to recognize patterns. (Swap et al., 2001) Experiential learning takes place through everyday work and other activities in which an individual acquires experiences that are accumulated and used in various ways (consciously and unconsciously). Thus, experiential learning has a significant role in the creation of human knowledge and expertise. (Průcha & Veteška, 2014)

Aspiring school principals are expected to have the same knowledge and skills as their predecessors, to learn many professional skills in a short time and to provide support to colleagues while they themselves are affected by day-to-day problems. (van Jaarsveld, Mentz & Challens, 2015)

Reflective practice is an important tool in a practice-based vocational education environment where people learn from their own professional experience rather than from formal learning or from experience of practice through knowledge transfer. It is the most important source of personal professional development and improvement. It is also an important way of linking theory and practice. Through reflection, one is able to see and label forms of thought and theory in the context of one's work. A person who reflects in the course of his or her practice is not just looking back at the past, but is consciously looking at emotions, experiences, actions and events that took place in the past. He or she uses this information to add to his or her existing knowledge base and come to some conclusion and a higher level of understanding. (Mathew, Mathew & Peechattu, 2017)

In the training of educational leaders who are not systematically prepared for their profession before taking up their posts in the Czech Republic, it is necessary to look for ways of appropriate knowledge transfer from more experienced school principals to those starting out by using elements of experiential reflective learning. At the Faculty of Education of Charles University, this is done in the School Management study programme in the Management in Practice course, which combines students' theoretical knowledge with practical experience imparted by school principals in management practice in authentic school settings, which helps the process of

transforming knowledge into skills. (Basic information about the study programme, online)

### 3 METHODOLOGY

The aim of the investigation is to find out the possible ways of transferring selected work activities of a departmental high school principal to students preparing for the position of manager of an educational institution, especially the school principal, in management practices and to compare the differences between the ways of transferring explicit and tacit knowledge.

The achievement of the objective is based on the analysis of literature, articles and legislation from which the work activities of the secondary school principal were identified and the results of a research survey conducted among departmental secondary school principals and students of the 3rd year of the School Management programme.

Research question: In what ways can the explicit and tacit knowledge of experienced principals be transferred to novice principals in management practice so that they can effectively use it in their own practice?

An electronic questionnaire containing 250 job activities and competencies of a high school principal was distributed to 11 departmental high school principals and 45 students in the School Management program in the spring of 2021. The return rate was 100%.

This paper defines, through an analysis of the results of the questionnaire survey, a part of the research investigation concerning the transferability of selected work activities of the secondary school principal in management practice as practical training for students of the School Management study programme. Data analysis was based on the calculation of relative frequencies (as a proportion of the total number of respondents).

## 4 RESULTS AND DISCUSSION

According to Table 1, the results of a questionnaire survey conducted in spring 2021 among 11 departmental high school principals and 45 third-year students in the School Management program indicate selected work activities that can be transferred to students in management practice mainly through documents (explicit knowledge). Both school principals and students chose one of the following options for the way of transferring knowledge and experience to students at the management practice: interpretation - model document - demonstration.

**Table 1: Views of departmental secondary school principals (SCHOOLS) and students (STUDENTS) on how selected explicit knowledge is imparted in management practices**

METHOD OF TRANSFER WORK ACTIVITIES	INTERPRETION (%)	A MODEL DOCUMENT (%)	SHOW (%)
develops a concept for the development of the school [SCHOOL]	28	27	27
develops the school development concept [STUDENTS]	9	73	11
develops and updates the school curriculum [SCHOOLS]	18	64	18
develops and updates the school curriculum [STUDENTS]	22	51	14
prepares an annual report on the activities and management of the school [SCHOOLS]	18	73	9
prepares an annual report on the activities and management of the school [STUDENTS]	5	82	11

*Source: Author results*

The school development concept is one of the basic strategic documents. Every school should have a clear idea of its existence, i.e. it must formulate its mission and vision. In the case of transferring the principals' experience in creating a school development concept, the most common method, according to the departmental school principals, is interpretation (28 %), followed by a model document (27 %) and

demonstration (27 %). Students prefer to be given a sample document (73 %) and a demonstration (11%). In the case of any document produced at school, it is always more beneficial to convey the experience by a sample of the document accompanied by an explanation of how to produce such a document. The development concept is the know-how of each school and the candidate comes to the audition with it as a blueprint for the future direction of the school. On the other hand, it is an excellent inspiration for future school principals, who at least get an idea of what such a document should contain and how often it should be updated. (Table 1)

The school curriculum belongs to the compulsory pedagogical documentation resulting from Section 28 of the Education Act and every secondary school must have it. It is a joint work of all teaching staff of the school. School principals (64%) and students (51 %) agreed that this activity can be conveyed in management practice most often by a model document, then by interpretation (18 and 22 % respectively), but also by demonstration (18 and 14 % respectively). This is a public document that must be available to anyone in the school. Some schools even publish it on their website, so it should also be available to students in management practice and accompanied by a comment from the school principal. (Table 1)

The annual report is a public document that must be accessible in the school and contains an overview of the school's activities for the past school year. Its requirements are laid down in Decree No 15/2005 Coll., laying down the requirements for long-term plans and annual reports, as amended. This clearly shows that the appropriate way to convey this activity to the practice is, according to both the school principals of department (73%) and the students (82%), to provide a model document. In the case of the directors, this was further supplemented by an explanation (18%). (Table 1)

The results of the research investigation further indicate in Table 2 those activities that can be transferred based on years of experience as a school principal (tacit knowledge).

**Table 2: Views of departmental secondary school principals (SCHOOLS) and students (STUDENTS) on how selected tacit knowledge is imparted in management practices**

METHOD OF TRANSFER WORK ACTIVITIES	INTERPRETION (%)	A MODEL DOCUMENT (%)	SHOW (%)
manages the school as an institution (SCHOOLS)	64	0	18
manages the school as an institution (STUDENTS)	71	0	11
represents the school in external dealings (SCHOOLS)	64	0	27
represents the school in external negotiations (STUDENTS)	53	2	20
represents the school in official and unofficial meetings with partners and at various public appearances (SCHOOLS)	73	0	18
represents the school at official and unofficial meetings with partners and at various public appearances (STUDENTS)	56	0	11

*Source: Author results*

The principal, as the statutory body of the legal entity and the manager who runs the school as an institution, must be equipped with the appropriate competences to do so. The school principal is responsible for the running of the entire organisation, for implementing the concept set out in the competition procedure and, in particular, for fulfilling the school's main functions. Managing a school as an institution is one of the principal's core jobs, so when it comes to imparting experience in this area, school principals are the most competent persons to bring students closer to the reality of managing an institution, which they most often do in management practice through explanations (64 %) or demonstrations (18 %).

Interpretation is a description of the processes that the director has to deal with on a daily basis, which are of a different nature and different every day. In the case of a demonstration, an understanding of school management can be gained through a guided tour of the school, where students can experience for themselves the

operational solutions to the situations they encounter at the time. The students agreed with the departmental school principals that the most common way of conveying this activity is through interpretation (71 %). This is due to the fact that due to the low time allocation of management practice there is currently not enough space for other ways of handover. (Table 2)

The function of the school principal as the school's statutory representative is related to the right to represent the school in external negotiations. Here again, the school principal is the person most responsible for conveying the school's experience to the students, which he or she does most often through interpretation (64 %), a view shared by the students (53 %). Another way of transferring is by demonstration in the case of the opinion of the principals (27 %). Representing the school is a diverse activity, starting with communication with all target groups (staff, students, parents, the founder, authorities, companies, social partners, etc.), through participation in various meetings, to the actual behaviour of the principal. While all of this can be described in explanatory terms, it is difficult to assess whether this is also the case in real situations. (Table 2)

This activity also involves representation at official and unofficial meetings with partners and public appearances. Directors say that interpretation (73%) and demonstration (18%) are most often used to convey their experience of this activity. Students also agree with interpretation (56%). The principal can explain the ways of representing the school that he/she practices, but there is nothing like a practical demonstration of how this is done. (Table 2)

## 5 CONCLUSION

The paper summarizes the results of a research investigation by the authors aimed at identifying ways of transferring selected explicit and tacit knowledge of departmental secondary school principals to students of the School Management degree programme at management practices that are part of the practical training of students, current and future managers of educational institutions. The results show that what matters is the choice of the appropriate method of knowledge transfer in management practice, so that it is most effective and students can apply it in their own practice.



In the case of the six work activities studied, which mainly concerned conceptual issues and the outward management of the school as an institution, the departmental secondary school principals and the students agreed, except in one case, in the same mode of transfer. In the case of the transfer of explicit knowledge, which mainly includes the production of documents (school development concept, school curriculum, annual report), the agreement between principals and students in the most frequent mode of transfer of explicit knowledge by document template was between 51% - 82%. The only exception was concept development, where 28% of principals reported that the most common mode of transmission was by interpretation and 73% of students by a model document.

The transfer of tacit knowledge (managing the school as an institution, representing the school in external negotiations, representing the school) acquired by departmental secondary school principals mainly through practice in the field and therefore experience, is much more complex, but there was complete agreement between the two groups of respondents in the choice of the predominant mode of transfer of given work activities in management practice by interpretation (53 % – 73 %).

In conclusion, it can be stated that management practices have their purpose, only a unified methodology of transfer of work activities of departmental secondary school principals needs to be set up to unify the outcomes of practical training of students of the School Management study programme. Definitely, the following methods of knowledge and experience transfer can be used in management practices - by interpretation and document model. The possibilities of transferring other work activities will be the subject of further research.

## References

- Abrahamsen, H., A., M. & Hellekjær, G. O. (2015). How do principals make sense of school leadership in Norwegian reorganised leadership teams? *School Leadership & Management*, 35(1), 62–78. doi:10.1080/13632434.2014.9927.
- Argote, L. & Ingram, P. (2000). Knowledge transfer: A basis for competitive advantage in firms. *Organizational Behavior and Human Decision Processes*, 82 (1), 150-169. DOI: 10.1006/obhd.2000.2893.
- Armstrong, M. and Taylor, S. (2015). *Řízení lidských zdrojů: moderní pojetí a postupy. (Human resource management: modern concepts and practices)*. Praha: Grada Publishing.
- Basic information about the study programme [online]. © 2021 [cit. 2022-01-28]. Available from: <https://www.kamv.cz/bakalarsky>.
- Bush, T. and Glover, D. (2003). *School Leadership: Concepts and Evidence*. Nottingham: National College for School Leadership.
- Contreras, T. S. (2016). Pedagogical Leadership, Teaching Leadership and their Role in School Improvement: A Theoretical Approach. *Propósitos y Representaciones* [online]. 4(2), 259–284. <https://doi.org/10.20511/pyr2016.v4n2.123>.
- Drucker, P. F. (2000). *Výzvy managementu pro 21. století. (Management challenges for the 21st century)*. Praha: Management Press.
- Edoun, E. I. (2011). Management Leadership and Governance in Education. *Proceedings of The 7th European Conference on Management Leadership and Governance*. 129-135.
- Gamble, J. (2020). Tacit vs explicit knowledge as antecedents for organizational change. *Journal of Organizational Change Management*, 33(6), 1123-1141, DOI: 10.1108/JOCM-04-2020-0121.
- Ganon-Shilon, S. and Schechter, C. (2016). Making sense of school leaders' sense-making. *Educational Management Administration & Leadership* [online]. 45(4), 682–698. doi:10.1177/1741143216628536.
- Hancock, D. R., Müller, U., Wang, C. and Hachen, J. (2019). Factors influencing school principals' motivation to become principals in the U.S.A. and Germany. *International Journal of Educational Research* [online]. 95, 90–96. doi: 10.1016/j.ijer.2019.04.004.

- Heystek, J. (2007). Reflecting on principals as managers or moulded leaders in a managerialistic school system. *The South African Journal of Education* [online]. 27 (3), pp 491-505.
- Kelly, A. (2004). The intellectual capital of schools: Analysing government policy statements on school improvement in light of a new theorization. *Journal of Education Policy*, 19(5), 609–629. <https://doi.org/10.1080/0268093042000269180>.
- Mathew, P., Mathew, P. & Peechattu, P. J. (2017). Reflective practices: A means to teacher development. *Asia Pacific Journal of Contemporary Education and Communication Technology* (APJCECT), 3(1), 126-131.
- Mládková, L. (2005). *Management znalostí. (Knowledge Management)*. Praha: Oeconomica.
- OECD (2009). *Creating effective teaching and learning environments: First results from TALIS*. OECD: Paris.
- Piaw, C. Y., Hee, T. F., Ismail, N. R. & Ying, L. H. (2014). *Factors of Leadership Skills of Secondary School Principals*. *Procedia – Social and Behavioral Sciences*, 116, 5125–5129. doi: 10.1016/j.sbspro.2014.01.1.
- Pont, B., Nusche, D. & Moorman, H. (2008). Improving School Leadership, Volume 1: *Policy and Practice*. OECD. Publishing: Paris. <http://dx.doi.org/10.1787/9789264044715-en>.
- Průcha, J. & Veteška, J. (2014). *Andragogický slovník. (Andragogical Dictionary)*. Praha: Grada.
- Sohrabi, S. & Naghavi, M. S. (2014). The Interaction of Explicit and Tacit Knowledge. *Proceedings of the International Conference on Intellectual Capital Knowledge Management & Organizational Learning* (ICICKM 2014), 363-369.
- Swap, W., Leonard, D., Shields, M., & Abrams, L. (2001). Using Mentoring and Storytelling to Transfer Knowledge in the Workplace. *Journal of Management Information Systems*, 18(1), 95–114. doi:10.1080/07421222.2001.11045668.
- van Jaarsveld, M. C., Mentz, P. J. & Challens, B. (2015). Mentorship for novice principals. *Tydskrif vir Geesteswetenskappe*. Vol. 55 No. 1, pp. 92-110.

## Acknowledgment

This paper was supported by COOPERATIO (programme of Charles University, Faculty of Education, 2022-2026).

## Contact details:

RNDr. Ing. Eva Urbanová, MBA  
 Department of Andragogy and Educational Management  
 Faculty of Education, Charles University  
 Myslíkova 7  
 110 00 Prague 1, CZECH REPUBLIC  
[eva.urbanova@pedf.cuni.cz](mailto:eva.urbanova@pedf.cuni.cz)

doc. PhDr. Jana Marie Šafránková, CSc.  
 Department of Andragogy and Educational Management  
 Faculty of Education, Charles University  
 Myslíkova 7  
 110 00 Prague 1, CZECH REPUBLIC  
[janamarie.safrankova@pedf.cuni.cz](mailto:janamarie.safrankova@pedf.cuni.cz)

---

# ANALYSIS OF THE APPLICATION OF THE CURRICULUM STRUCTURING STRATEGY FROM THE TEACHERS' POINT OF VIEW IN THE DEVELOPMENT OF LEARNERS' CRITICAL THINKING

---

Nina Kozárová, Gabriela Petrová

## Abstract:

The Department of Pedagogy of the University of Constantine the Philosopher in Nitra conducted a survey (87 respondents) to determine whether there are differences between groups of teachers in the field based on the length of their teaching practice with regard to: a) applying (frequency) the strategies of curriculum structuring in their own teaching process; b) the importance (meaning) that teachers assign to the curriculum structuring strategies with respect to the development of learners' critical thinking.

## Key words:

curriculum structuring, conceptual mapping, mental representations, critical thinking, strategies

## 1 INTRODUCTION

Questions of teaching process improvement have been emerging since the beginnings of organized education. In recent decades we have seen a growing negative response to the quality of teaching procedures applied in educational practice. If we analyse the level of the current teaching practice according to more modern criteria (which are applied in the world - and we want to get closer to them) we can blame this for being less adaptable and inflexible to changes. (This practice can't predict them).

Modernization trends mark what happens to a learner and his internal knowledge structure when processing the content of education. Following international efforts to support the development of learners' critical thinking in the teaching process it is desirable in our provenance to identify educational strategies that have the potential to stimulate learners' critical thinking. Nowadays we know that teaching scientific knowledge is not enough but that part of effective teaching is also the development of skills linked to critical thinking such as the ability to identify key ideas, recognize important connections, correctly interpret data, draw logical conclusions from information, evaluate the reliability of evidence, systematically structure the information.

## 2 CRITICAL THINKING IN EDUCATIONAL PRACTICE

The source for defining critical thinking development strategies is the evidence that the ability to think critically can be directly influenced in the educational process (Halpern, 2014; Abrami, et al., 2008; Rodriguez Ortiz, 2018; Heyman, 2008; Baker, 2016; Bandvopadhyay & Szostek, 2019). Teachers in schools, regardless of subject specificity are given tasks aimed at developing the ability to psychodidactically process the curriculum, to include in teaching such strategies that stimulate critical thinking skills and to create situations in which learners acquire the ability to think critically.

Paul & Elder (2014) characterize the critical thinker with these specifics: he/she produces important questions and problems, gathers and assesses relevant information, uses Abstract: thinking for effective explanation, comes to conclusions and solutions by testing them based on criteria and standards, communicates effectively in solving complex problems, is able to independently structure information and modify its internal knowledge system.

Authors who operationalize critical thinking overlap in several constructs, have determined that critical thinking is defined through cognitive abilities which are examined in relation to other components of personality, psychic processes or basal skills. According to Lai (2011) the following dominate: argument analysis (Halpern, 2014; Franco eds., 2014); argument-based deduction (Oliver eds., 2008); assessment and evaluation (Case, 2005; Ulger, 2016); problem solving (Wheatley, 1991; Arisoy

& Aybek, 2021); defining the terminology (Wu, 2007; Alvunger, 2018); viewing the problem from multiple sides (Tindal & Nolet, 1995; He eds. 2011).

## 3 CURRICULUM STRUCTURING AS A DETERMINANT OF CRITICAL THINKING DEVELOPMENT

At present, the way in which learners' content is conveyed (in the finished form) and the role that learners play in the educational process is often criticized (they do not have to look for interrelationships, they become a responsive being rather than an independent thinker). Learning strategies are among the main topics of psychology, pedagogy, specific subject didactics but also educational policy in the context of curricular changes. We consider educational strategies to be key determinants of effective learning but also the achievement of educational goals (Ertmer & Newby, 2013). We are convinced that the adoption of appropriate educational strategies is one of the key goals of lifelong learning.

Learning strategies that develop critical thinking include: curriculum structuring, conceptual mapping, summarizations, syntheses, mnemonics, information organization, analogies, organization and ordering of information to encourage optimal information processing. For these reasons we focused our research on the curriculum structuring strategies that are used in educational practice.

We understand the curriculum as a transformed selection of educational content, taking into account the goals and age of learners. In school conditions it is not possible to convey the curriculum to learners except only dogmatically, without understanding, without analysing key concepts and relationships between them (Soyibo, 1995; Kinchin, 2000). It is necessary for us to lead learners to work with the curriculum, to set aside essential information independently, to operationalize new terms and concepts, to take notes.

In connection with the swelling of the curriculum, which is a constantly resonant topic in many professional discussions, the term didactic transformation of the curriculum is becoming known. It is a simplified model for the selection of educational content, which corresponds in its internal structure to scientific knowledge (Štech, 2004). The reconstructed content parts of the curriculum are not only simplified

interpretations but are comprehensively constituted in such a way as to develop learners' knowledge and categorize information into logical systems. The aim of didactic reconstruction is to help modify the learners' mental representations into a flexible structure, accepting conceptual changes in the original representations.

Optimal structuring of the curriculum prevents mechanical learning of selected content, supports the processing of the curriculum in its own - understandable way (Knecht, 2007). The problem of contemporary educational practice is that learners know how to name facts, data, concepts but are not able to notice, interpret or compare the concepts of the so-called conceptual - relational network. We recognize three forms of curriculum layout: linear form, nonlinear form, nonlinear Abstract:representations. Within the issue of curriculum structuring we distinguish between traditional (structure of main concepts, schematic outline, graph of logical structure of curriculum) and modern structuring (top-down and bottom-up type processing, conceptual mapping).

## 4 RESEARCH INVESTIGATION

Between the years 2020 - 2021 research was carried out (the research sample consisted of 87 teachers) and the aim was to determine whether there are differences between groups of teachers (according to the length of teaching practice) in the aspect of: a) application (**frequency**) of curriculum structuring strategies in their own teaching process; b) the importance (**meaning**) that teachers assign to the strategies of curriculum structuring in educational practice with regard to the development of the learners' critical thinking.

The teachers filled out a questionnaire using scales with options to express the frequency of use of the curriculum structuring strategy and the meaning they attribute to it in teaching (for example whether teachers lead learners to schematic representations of curriculum, whether they themselves use different structuring forms during curriculum presentation, how do they approach categorizations and systematization of information, how do they detect relationships between concepts in the curriculum). Based on the above we established the following research hypotheses:

**H1:** We assume that groups of teachers (according to the length of pedagogical practice) perceive the application (frequency) of the curriculum structuring strategy in their own teaching process differently.

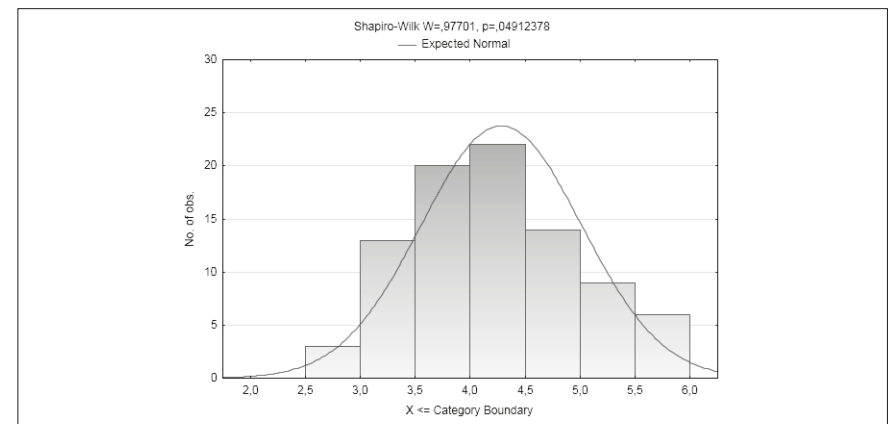
**H2:** We assume that groups of teachers (according to the length of pedagogical practice) assign different importance (meaning) to the application of the curriculum structuring strategy in their own teaching process.

Teachers (87 respondents) were divided into groups, according to the length of teaching experience:

- Group 1: professional adaptation (1 - 5 years of experience)
- Group 2: professional advancement (5 - 15 years of experience)
- Group 3: professional stabilization (15 - 30 years of experience)
- Group 4: professional conservatism (30 years or more).

The aim was to find out whether the differences between the groups of teachers in the area of implementation (frequency) of the strategies are statistically significant. The assumption of a normal distribution of the observed trait values was not met (Chart 1). We used the Kruskal-Wallis test to determine the statistical significance of differences between groups of teachers in applying the curriculum structuring – frequency.

**Chart 1: Division of Values for the Curriculum Structuring Dimension in the Application of Relevant Strategy.**



Source: own processing

The tested hypothesis in this case was the null hypothesis : between the considered 4 groups of teachers created according to the length of their practice there is **no** statistically significant difference in the application of strategies in their own teaching process in the dimension of curriculum structuring. The null hypothesis was tested with the Kruskal-Wallis test against the alternative hypothesis : that **there is** a statistically significant difference between the considered 4 groups of teachers created according to the length of their practice in the area of applying strategies in the curriculum structuring dimension.

We calculated the value of the test criterion  $H = 10.2669$  and the value  $p = 0.016$ . Since the calculated value of the probability  $p$  is less than 0.05 we reject the null hypothesis at the significance level  $\alpha = 0.05$  meaning that the difference between the four groups of teachers in the area of application of the respective strategy in their own teaching process in the dimension of curriculum structuring is statistically significant. This proved that the application of the relevant strategy in the teaching process in the curriculum structuring dimension is statistically significantly influenced by the length of the teacher's practice. Using the Kruskal - Wallis multiple comparison test we found out which groups of teachers (based on the length of their practice) are statistically significantly different from each other in the application of the strategy.

**Table 1: Results of the Kruskal - Wallis Test of Multiple Comparison ( $p$  – values)**

	Group 2 Professional Advancement	Group 3 Professional Stabilization	Group 4 Professional Conservatism
<b>Group 1</b> Professional Adaptation	<b>0.029*</b>	0.422	1.000
<b>Group 2</b> Professional Advancement		0.400	0.135
<b>Group 3</b> Professional Stabilization			1.000

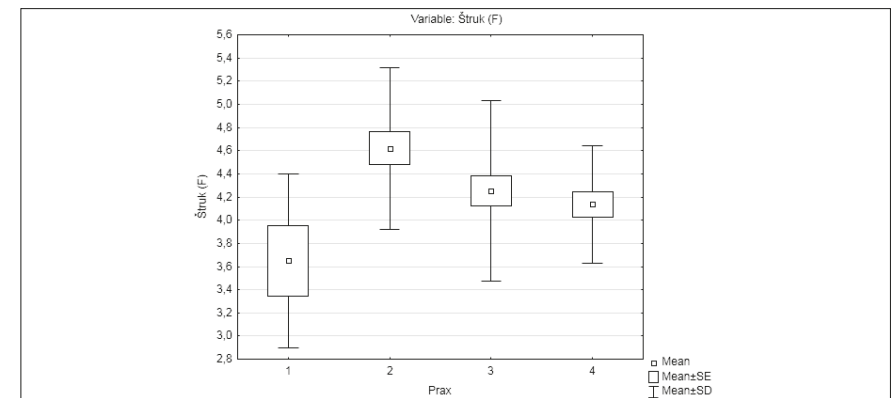
Source: own processing

In Table 1 we see that there is a statistically significant difference in the application of the Curriculum Structuring strategy between the 1st and 2nd group of teachers - the values of the probability  $p$  are less than 0.05. This means that teachers with

practice of 1 to 5 years apply (*frequency*) strategies of curriculum structuring in their own teaching process statistically significantly differently than teachers with experience of 5 to 15 years. The situation is illustrated in Chart 2. We can see that teachers - professional advancement (5 - 15 years of practice) use the stated strategies most often.

We believe this is due to many years of experience in education but also to the effort to seek out new strategies that would be helpful for learners. Conversely, teachers who are in professional adaptation (1-5 years of practice) use curriculum structuring strategies the least. Although it is clear that they know the strategies of critical thinking, they have mastered the methodology of use theoretically but they are not able to adequately connect them with the individual topics of the curriculum.

**Chart 2: Average Values of Curriculum Structuring (*frequency*) in Four Groups of Teachers.**



Source: own processing

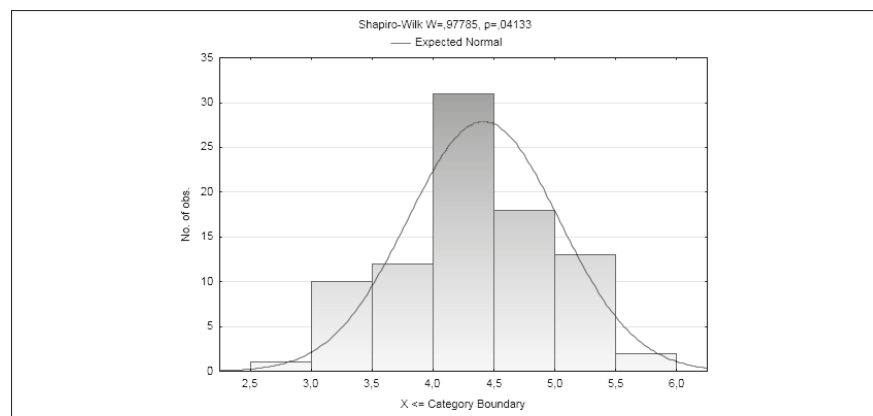
Our aim was also to find out whether the differences between the groups of teachers in attributing the importance (meaning) of the implementation of strategies in the teaching process in the dimension of curriculum structuring are also statistically significant.

To verify the assumption of a normal distribution of values for the dimension of curriculum structuring - *meaning*, we used the Shapiro-Wilk test and calculated the value of the test statistic  $W = 0.9778$  and the value of the probability  $p = 0.0413$ . Since the value of probability  $p$  is less than 0.05, the tested hypothesis about the normal



distribution of values for the curriculum structuring - *meaning* is rejected at the level of significance  $\alpha = 0.05$ . This means that the division of values for dimension of curriculum structuring - *meaning* in the application of the relevant strategy in the teaching process cannot be considered normal.

**Chart 3: Division of Values in the Dimension of Curriculum Structuring in Understanding the Importance of the Strategy.**



Source: own processing

When testing the statistical significance of differences between groups of teachers tested was the hypothesis : among the considered four groups of teachers created according to the length of their practice there **is no** statistically significant difference in understanding the importance of strategy in the teaching process in the curriculum structuring dimension. We tested the null hypothesis against the alternative hypothesis that among the considered 4 groups of teachers created according to the length of their practice **there is** a statistically significant difference between groups regarding the understanding of the importance of strategy in the teaching process in the curriculum structuring dimension.

Since the assumption of a normal distribution of the values of the curriculum structuring dimension was not met, we also used a non-parametric method - the Kruskal-Wallis test to verify the validity of the null hypothesis. We calculated the value of the test criterion  $H = 10.462$  and the value  $p = 0.015$ . Since the calculated value of the probability  $p$  is less than 0.05, we reject the null hypothesis at the significance level  $\alpha = 0.05$  meaning that the difference between the four groups of

teachers (based on the length of their practice) in understanding the importance of strategy in the teaching process of the curriculum structuring dimension is statistically significant. This demonstrated that understanding the importance of strategies in the teaching process in the curriculum structuring dimension is statistically significantly influenced by the length of the teacher's practice. Using the Kruskal - Wallis multiple comparison test meant searching to realize which groups of teachers (based on the length of practice) are mutually statistically significantly different from each other in understanding the importance of the curriculum structuring strategy.

**Table 2: Results of Kruskal – Wallis Multiple Comparison Test ( $p$  – values)**

	Group 2 Professional Advancement	Group 3 Professional Stabilization	Group 4 Professional Conservatism
Group 1 Professional Adaptation	0.04*	1.00	1.00
Group 2 Professional Advancement		0.26	0.05*
Group 3 Professional Stabilization			1.000

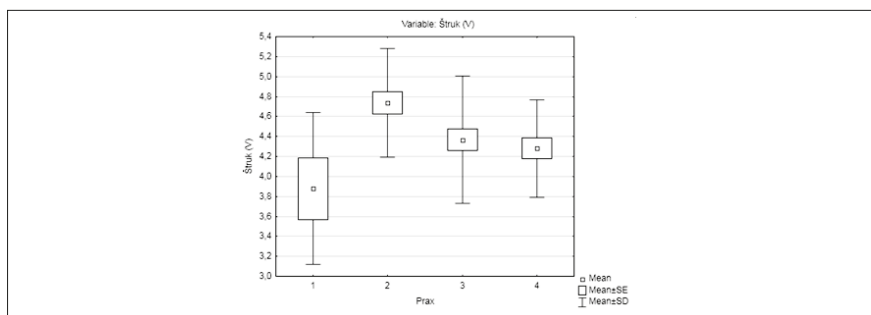
Source: own processing

In Table 2 we see that there is a statistically significant difference in understanding the importance of the respective strategy in the teaching process itself of the curriculum structuring dimension between the 1st and 2nd group of teachers and between the 2nd and 4th group of teachers - probability values  $p$  are less than 0.05. This means that teachers with practice of 1 to 5 years statistically and significantly differently perceive the importance of strategy in the teaching process differently in the curriculum structuring dimension as compared to the teachers with an experience of 5 to 15 years.

From results of previous findings teachers with shorter practice do not have the competencies and skills with the given strategy, consequently they do not sufficiently perceive its justification and necessity in the educational process. On the contrary teachers with longer practice have sufficient experience, they are better able to

manage time of the teaching process; therefore they organize educational activities with emphasis on the use of individual strategies of curriculum structuring.

**Chart 4: Average Values of Curriculum Structuring (*meaning*) in Four Groups of Teachers.**



Source: own processing

## 5 CONCLUSION

If we want to make the educational process more efficient, learning and teaching need to be active, meaningful and effective. The question remains. Is it even possible? Which teaching regime (with regard to the development of learners' critical thinking) is the best? Can working with different curriculum structures affect teaching effectiveness? Do teachers place sufficient emphasis on the development of learners' higher cognitive functions?

We defined the analysed strategy of developing critical thinking - structuring the curriculum in order to help teachers of individual subjects to grasp strategies developing critical thinking and prepare their transfer to the curriculum of relevant subjects, which will be based on interdisciplinary links and lead to a common goal: educating a critical, naturally curious person with an open mind.

## References

- Abrami, P. C. et al. (2008). Instructional interventions affecting critical thinking skills and dispositions: A stage 1 meta-analysis. *Review of Educational Research*, 78 (4).
- Alvunger, D. (2018). Teachers' curriculum agency in teaching a standards - based curriculum. *The Curriculum Journal*, 29 (4), 479-498.
- Arisoy, B. & Aybek, B. (2021). The Effects of Subject - Based Critical Thinking Education in Mathematics on Students' Critical Thinking Skills and Virtues. *Eurasian Journal of Educational Research*, 92, 99-120.
- Baker, M. J. (2016). *The Negotiation of Meaning in Epistemic Situations*. In: International Artificial Intelligence in Education Society 2015.133-149. DOI 10.1007/s40593-015-0050-3.
- Bandyopadhyay, S. & Szostek, J. (2019). Thinking critically bout critical thinking: Assessing critical thinking of business students using multiple measures. *Journal of Education for Business*, 94 (4), 259-270.
- Case, R. (2005). Moving critical thinking to the main stage. *Education Canada*, 45 (2), 45-49.
- Ertmer, P. A. & Newby, T. J. (2013) Behaviorism, cognitivism, constructivism: comparing critical features from an instructional design perspective. In *Performance Improvement Quarterly*, 26 (2), 43-71.
- Franco, A. R. Almeida, L.S., Saiz, C. (2014). Critical thinking: Reflections about its place in Higher Education. In *Educatio Siglo XXI*, 32 (2), 81 - 96. DOI 10.6018/j/202171
- Gavora, P. (2011). Čo potrebuje vedieť učiteľ o štruktúre výkladového textu učebnice? In *Didaktika*, 2 (1), 14-16.
- Halpern, D. F. (2014). *Tought and Knowledge. An Introduction to Critical Thinking*. (5 ed.) New York, London: Taylor & Francis,
- He, Y., Song, L., Xie, G., Chen, Y., Huang, A., Liu, P. (2011). Discussion on the Structure and Optimization Approaches of the Teachers Curriculum Quality. In: *ICFCSE 2011: International Conference on Future Computer Supported Education*, 583-585.

- Heyman, G. D. (2008). Children's critical thinking when learning from others. *Current Directions in Psychological Science*, 17 (5), 344-347.
- Kinchin, I. M. (2000). Concept – mapping activities to help students understand photosynthesis – and teachers understand students. In *School Science Review*, 82 (299), 11-14.
- Knecht, P. (2007). Didaktická transformace aneb od „didaktického zjednodušení“ k „didaktické rekonstrukci“. In: *Orbis scholae*, 2 (1), 67-81.
- Lai, E. R. (2011). *Critical Thinking: A Literature Review*. [online]. <https://goo.gl/y7AjTJ>
- Oliver, R., Kersten, H., Vinkka-Puhakka, H., Alpasan, G., Bearn, D., Cema, I., Delap, E., Dummer, P., Goulet, J. P., Gugushe, T. (2008). Curriculum structure: principles and strategy. *European Journal of Dental Education*. 12, 74-84. DOI 10.1111/j.1600-0579.2007.00482.x
- Paul, R., & Elder, L. (2014). *Critical Thinking. Second Edition. Tools for Taking Charge of Your Professional and Personal Life*. Upper Saddle River, New Jersey: Pearson Education, Inc.
- Rodriguez Ortiz, A. M. (2018). Ontological elements of critical thinking. *Teoria de la Education*, 30 (1), 53-74.
- Soybo, K. (1995). Using concept maps to analyze text book presentations of respiration. In *American Biology Teacher*, 57 (6), 344-351.
- Štech, S. (2004). Psychodidaktika jako obrat k tématu účinného vyučování. Komentár na okraj Kansanenovy úvahy Didaktika a její vztah k pedagogické psychologii. In *Pedagogika*, 54 (1), 58-63.
- Tindal, G., & Nolet, V. (1995). Curriculum-based measurement in middle and high schools: Critical thinking skills in content areas. *Focus on Exceptional Children*, 27 (7), 1-22.
- Ulger, K. (2016). *The Relationship between Creative Thinking and Critical Thinking Skills of Students*. 31 (4), 695-710. DOI 10.16986/HUJE.2016018493
- Wu, Y. (2007). A pilot study of applying hierarchical curriculum structure graph for remedial learning. In: *7th IEEE International Conference on Advanced Learning Technologies*, 103-107.

## Acknowledgements

The paper was developed with support under project VEGA 1/0391/20 Transformative learning of the student teachers in the context of pupils' critical thinking development.

## Contact details:

prof. PhDr. Gabriela Petrová, CSc.  
 doc. PaedDr. Nina Kozárová, PhD.  
 Department of Pedagogy  
 Faculty of Education  
 Constantine the Philosopher University in Nitra  
 Dražovská cesta 4  
 949 01 Nitra, SLOVAKIA  
 E-mail: nkozarova@ukf.sk

---

# EDUCATION FOR CARERS OF OLDER VULNERABLE PEOPLE: SKILLS AND COMPETENCES AS KEY FACTORS IN THE PROVISION OF QUALITY CARE

---

Vladimíra Dostálová, Alžběta Bártová, Martina Pojarová, Iva Holmerová

## Abstract:

The paper focuses on key educational activities that support the professional development, competences and skills of social care workers providing social care to vulnerable older people with dementia in their own environment. In providing quality care for this target group, it is essential that workers are equipped with sufficient knowledge and skills to be able to apply them effectively in practice. Based on our findings, we identified 7 areas of training which we then implemented through appropriate courses.

## Key words:

ageing, dementia, social services, quality of care, education

## 1 INTRODUCTION

Population ageing is a phenomenon of contemporary society. In the Czech Republic, there are currently more than 2 million people over 65 years (21%). The Czech Statistical Office (CSO) predicts that by 2050 there will be approximately 3 million people over 65 years (33%) in the Czech Republic (CSO, 2018). As a result of ageing, health status changes very often. Health status in older age is usually characterised by the chronicity of diseases and their complexity. Chronic diseases of older age include in particular neurodegenerative diseases (Alzheimer's disease and other causes of dementia, including vascular diseases) and then geriatric syndromes (frailty syndrome, instability with falls, incontinence, complex cognitive disorders, dementia, etc.). Polymorbidity - the presence of multiple diseases - is a very frequent condition. As a result of changes in health status, older people experience changes

in functioning leading to disability and reduced self-sufficiency (Holmerová et al., 2014).

Despite illnesses, disability or reduced self-sufficiency, the wish of older people is to remain in their own environment (Holmerová et al., 2014). Care for people in their own environment is provided either by home health care services, which include nursing, rehabilitation or palliative care (MoH, 2011), or through outreach social services, which include personal care. The social personal services provide care for people with reduced self-sufficiency in old age or people with chronic illness or disability. In addition, this care is also provided to families with children in a situation where they need the help of another person (MLSA, 2006). In particular, older people often use both forms of care at the same time.

Providing care to people in their home environment, both health and social care, is associated with a number of challenges. The characteristic of good quality care is its complexity, coordination and continuity. It is based on the provision of safe, effective, timely, equitable and individualised care (WHO, 2020). In view of the above, the education, experience and skills of staff providing care to older people in their home environment are clearly fundamental to the delivery of quality care (GOV UK, 2013; Kusmaul, 2016; Price & Reichert, 2017). Appropriate education does not only impact the quality of care provided as such, but also has an impact on improving communication skills between carer and client (McFarlane & Mclean, 2003). Essential knowledge and skills of caregivers include 1) critical thinking and problem-solving skills; 2) the ability to establish quality relationships with clients and family caregivers; 3) a basic understanding of health issues; and 4) skills related to personal client care (PHI, 2003).

The aim of our paper is to present a process for identifying and delivering key learning activities that support the professional development, competences and skills of staff who provide social care to vulnerable older people living with dementia in their own settings

### **Prague 7 Care Centre (Pečovatelské centrum Praha 7)**

Our research was carried out in the Prague 7 Care Centre (PCP7), a provider of social services mainly for older people and their families. PCP7 provides residential and outpatient respite care as well as field care of people in their own environment.

The provision of social care, the range of staff authorised to provide such care, and the required education are governed by Act No 108/2006 Coll., on Social Services, as amended, and other relevant statutory and sub-statutory standards.

## **2 METHODS**

To achieve our aim of implementing educational activities to support care workers caring for particularly vulnerable older people living with dementia in their own environment, we set out a process consisting of the following steps:

1. identification of support needs from the perspective of social workers and personal care workers,
2. identifying key activities to support the professional development and skills of social workers and personal care workers,
3. developing education plan that includes the identified key activities and is in line with the educational requirements for social workers and personal care workers according to Act No 108/2006.

### **Identification of support needs from the perspective of social workers and personal care workers**

We adopted a qualitative descriptive approach to identify needs (Grove, Burns, & Gray, 2013). The qualitative descriptive approach is based on describing and interpreting the experiences and actions of people or groups of people in a social and cultural context. During data collection, researchers focus on questions that clarify situations in a given context, and in particular, they look for "what" led individuals to act or experience a given action or experience and "why" this was the case (Holly et al., 2014).

### **Respondents**

We adopted a purposive sampling method to select respondents to match the aim of our research (Campbell et al., 2020). The inclusion criteria were 1) social workers who are responsible for care coordination and social work with outreach service clients

and their families and 2) personal care workers who provide care to vulnerable older people within the outreach service. A total of 7 social workers (6 women and 1 man) and 18 personal care workers (17 women and 1 man) participated in the study.

### Data collection

Data were collected through semi-structured interviews with social workers and through focus groups with personal care workers. In total, we conducted seven semi-structured interviews and three focus groups. We conducted the interviews in October and November in 2020. All interviews were consistently recorded with detailed transcripts. The semi-structured interviews lasted from 20 to 40 minutes. The focus groups lasted from 40 to 60 minutes.

For both semi-structured interviews and focus groups, we had a pre-prepared interview guide with open-ended questions. Participants in the semi-structured interviews were first asked the initiating question, "What are the opportunities and barriers in caring for clients with cognitive deficits?" Participants in the focus groups were then asked the following initiating question, "What is your experience in caring for clients with cognitive deficits?" To gain a deeper understanding of the participants' accounts, we asked follow-up and prompting questions.

### Data analysis

Data from both semi-structured interviews and focus group were analysed using inductive content analysis (Graneheim, Lindgren, & Lundman, 2017), which is recommended for analysing verbal or written communication. The principle of content analysis is the coding and subsequent categorization of codes (Graneheim & Lundman, 2004; Vaismoradi, Turunen, & Bondas, 2013) procedures and interpretation. This paper provides an overview of important concepts (manifest and latent content, unit of analysis, meaning unit, condensation, abstraction, content area, code, category and theme. This method is particularly useful for identifying individuals' opinions, attitudes, and experiences (Downe-Wamboldt, 1992). In the first part of the analysis process, we read the interview transcripts in detail several times to best understand their content. Then we identified the significant parts - words, sentences or paragraphs - that were relevant to the aim of our research. We coded these parts and then grouped them according to similarity into three categories: 1) the need to be able to recognize and assess changes in the client's cognitive

function; 2) the need for coordinated care, including cooperation with other stakeholders; and 3) the need to manage communication.

## 3 RESULTS

Based on the data analysis, we identified three areas that are key for social workers and personal care workers in caring for clients living with dementia in their own environment, and where they also find insufficient support or knowledge and skills. Although both groups of respondents identified the same areas in which they needed support, the identified skills and knowledge perceived by respondents to be important in these areas were specific to each group due to the positions held in PCP 7 and the associated job roles. This finding led to Step 2 - identifying key activities that support the professional development and skills of social workers and personal care workers.

### Identification of key activities supporting professional development and skills

We have chosen the following approach to identify key activities. First of all, we proceeded to the creation of job profiles, which we based mainly on the Act No. 108/2006, examples of good practice, study of professional literature, professional articles and research. Subsequently, we compiled an overview of the competences of individual PCP 7 staff members involved in the care of the above-mentioned group of clients. At this stage we included all staff who come or may come into contact with both clients with dementia and their informal carers (Table 1).



**Table 1 Overview of job positions and competences**

Job position	Overview of competences
Social worker	Dementia Minimum - Comprehensive knowledge of dementia syndrome. Causes of dementia, symptoms (ABC), warning signs, communication with the person with dementia, specific needs, P-PA-IA 12.
	Assessing client cognitive function - using and evaluating methods that are often used to diagnose cognitive impairment in clients. PCP7 client assessment, possible early detection of dementia syndrome and other often confused disorders (depression, delirium), assessment of clients' cognitive function in relation to e.g., individual planning of client's needs, selection and ongoing evaluation of social activation.
	Needs of the client with dementia, Individual care plan, updating and implementation
	Individual service provision process - to be able to choose between appropriate tools for obtaining information about the lives of service users with dementia in the individual service provision process.
	Communication with family caregivers - complex issues for family caregivers of persons with dementia.
	Basics of case management in dementia care - planning, implementation, coordination, monitoring and evaluation of individual forms of support and services corresponding to the needs of the client with dementia.
Personal care worker	Information transfer - knowledge of guidelines and sequence of steps.
	Dementia Minimum - Comprehensive knowledge of dementia syndrome. Causes of dementia, symptoms (ABC), warning signs, communication with the person with dementia, specific needs, P-PA-IA.
	Using the Warning Signals tool - Providing an easy-to-use tool designed to assess a change in status. Based on a total of 6 categories, personal care workers can continuously monitor the client's cognitive status and catch any changes early. This information is passed on to the coordinator during the client meeting who will continue to work with it according to the guidelines
	Communication skills - specifics of communication with people with dementia, basic information and tools to help improve communication with these clients.
Social Care Coordinator	Psychosocial intervention in dementia care.
	Dementia Minimum - Comprehensive knowledge of dementia syndrome. Causes of dementia, symptoms (ABC), warning signs, communication with the person with dementia, specific needs, P-PA-IA.
Director, Deputy Director	Basics of case management in dementia care - planning, implementation, coordination, monitoring and evaluation of individual forms of support and services corresponding to the needs of the client with dementia.
	Dementia Minimum - Comprehensive knowledge of dementia syndrome. Causes of dementia, symptoms (ABC), warning signs, communication with the person with dementia, specific needs, P-PA-IA.

12 P-PA-IA – A CALS strategy that responds to the needs of people with dementia according to the different stages of dementia progression (Holmerová et al., 2013).

## Developing an education plan

Based on our findings and their comparison, we have proposed 7 areas of education that are important for this group of workers to practice their profession or to provide quality care. The learning areas also correspond to the categories that emerged from the analysis of the semi-structured interviews and focus groups (Table 2).

**Table 2 Areas of education and categories**

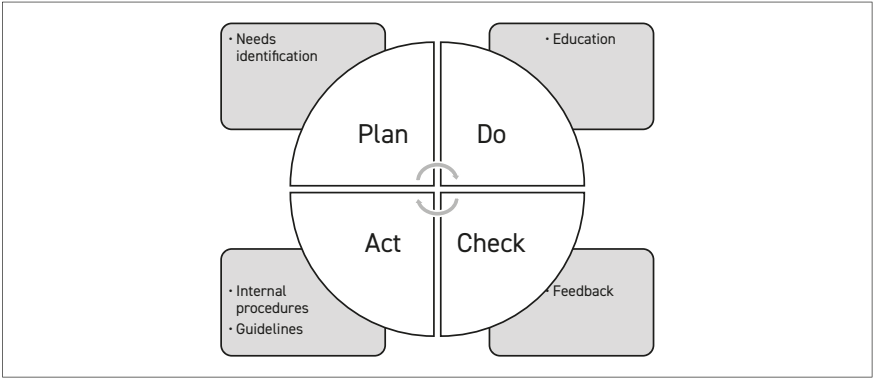
Areas of education	Categories
1. Warning signs of cognitive changes	Recognition and assessment of changes in cognitive function
2. Assessment of cognitive function using valid tools	
3. Basics and principles of geriatric functional assessment	The need for coordinated care including cooperation with other stakeholders
4. Development of an individual care plan and its implementation in practice	
5. Principles of case management	
6. Specifics of communication with people living with dementia	The need to manage communication
7. Specifics of communication with informal carers	

For the implementation of the above-mentioned areas of education, we used both existing accredited courses, seminars and trainings, and we also created of our own trainings and courses, the content of which was adapted to the specific needs of staff involved in the care of clients living with dementia. For the implementation of training belonging to the category "Recognition and assessment of changes in cognitive functions" we chose the course of the Czech Alzheimer's Society (CALS) "Assessment of cognitive functions" (CALS, 2015b). For the areas of education arising from the category "Need for coordinated care including cooperation with other stakeholders", we developed our own course focusing on the principles of comprehensive geriatric assessment. For the area of individual planning, we selected the course "From My Life" as appropriate (CALS, 2015c). Principles of case management are the content of the CALS accredited course "Education and Training of Consultants" (CALS, 2015a). The Diakonia Academy offered courses from its portfolio specifically focused on communication with people living with dementia, including communication with informal carers (DA, 2022b, 2022a). For this reason, we included these courses in the

third category,” The need to manage communication”. These educational activities were delivered throughout 2021.

An integral part of the educational process and the implementation of the acquired knowledge into practice was ensuring feedback from the employees who participated in the entire educational process. The aim of the feedback was to find out whether and how the participants of the educational programme were able to apply the knowledge acquired in practice. Based on the findings of the feedback and its analysis, we have developed internal procedures and guidelines, which include recommendations for providing care to people living with dementia in their own environment (Figure 1).

Figure 1 Process of identification and implementation of educational activities



4 CONCLUSION

The results of the analysis of the interviews conducted and their subsequent comparison with the existing legislation and recommendations led to the identification of 7 areas of education, which we implemented either through existing training and courses or we developed courses whose content was specific to the needs of PCP 7 staff. Our intention was that the care provided to people living with dementia in their own environment should be of the highest quality, as the care provided has an impact on subjective assessments of quality of life (Strandenaes et al., 2021).

When designing the educational plan and individual educational activities, it was undoubtedly essential to place emphasis on their content, which had to be designed to contribute to the personal and professional growth of the educational participants (Coogle, Jablonski, Rachel, & Parham, 2008). It is important that the content of educational programmes is based on the careful analysis of the educational needs in a given context, and in particular on empirical research in the workplace (Gould, Kelly, White, & Chidgey, 2004). Also, a primary step in developing an effective training plan was to assess the specific competences needed and the associated training standards, which in turn leads to successful professional development of employees (Stone & Harahan, 2010) committed, paid long-term care workers who are able to meet the needs of older adults. Efforts to address the shortage must be informed by a conceptual framework that acknowledges the unique circumstances affecting these workers. These include nontraditional market forces, low compensation and prestige, limited career opportunities, and inadequate preparation for evolving roles and responsibilities. Applying this framework, we identify strategies that can reverse current trends by expanding worker supply; improving education, training, and developmental activities; and making delivery of long-term care services and supports to older people a more attractive alternative to employment in acute and primary care settings."

For the high quality of care provision it is important, beyond formal education and knowledge, to cultivate and support skills, that enable caregivers to respond to crisis situations, effectively communicate with clients with mental illness or family caregivers, even without the presence of a supervisor. (PHI, 2003). Thus, in training, and the "learning process" through active participation it is important to develop such competences of our trainees that they will be able to apply effectively in practice, and especially the ability to think independently and to perceive learning as a lifelong process (Veteška & Tureckiová, 2018).

Currently, the most common form of lifelong learning for social workers and personal care workers is in-person education. These are usually courses, seminars, training, internships or conferences that are accredited by the Ministry of Labour and Social Affairs (MLSA, 2006). However, in view of the current situation regarding the COVID-19 pandemic and the related restrictive measures, the starting point was to transfer part of the training to the online platform, despite the fact that initially the educational programmes were accredited only as face-to-face programmes. Currently, also in the context of the Covid-19 pandemic, virtual and hybrid education

is being developed, where it is possible, for example in the form of so-called virtual co-teaching, where one educator is physically present and the other one virtually, which can be of great benefit when it comes to an expert who, for various reasons, could not actually be physically present in the educational process (Kursch, 2021; Svobodová, 2021; Veteška, Kursch, Svobodová, Terckiová & Paulovčáková, 2020). We consider the above-mentioned style of training to be very beneficial for the training of social workers and personal care workers, as, for example, sharing examples of good practice is one of the effective ways of transferring professional information to trainees.

## References

- CALS. (2015a). Edukace a trénink poradců. Retrieved from Česká alzheimerovská společnost website: <https://www.alzheimer.cz/vzdelavani-cals/akreditovane-kurzy/vicedenni-kurzy/edukace-a-trenink-poradcu/>
- CALS. (2015b). Hodnocení kognitivních funkcí. Retrieved from Česká alzheimerovská společnost website: <https://www.alzheimer.cz/vzdelavani-cals/akreditovane-kurzy/jednodenni-kurzy/hodnoceni-kognitivnich-funkci/>
- CALS. (2015c). Z mého života. Retrieved from Česká alzheimerovská společnost website: <https://www.alzheimer.cz/vzdelavani-cals/akreditovane-kurzy/jednodenni-kurzy/z-meho-zivota/>
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S. Walker, K. (2020). Purposive sampling: Complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 652–661. doi: 10.1177/1744987120927206
- Coogler, C. L., Jablonski, R., Rachel, J. A., & Parham, I. A. (2008). Skills-Enhancement Training Program for Home Care Providers: Implications for Redefining Quality Care. *Home Health Care Management & Practice*, 20(4), 312–322. doi: 10.1177/1084822307310762
- CSO. (2018). Projekce obyvatelstva České republiky—2018—2100. Retrieved 27 March 2021, from Projekce obyvatelstva České republiky—2018—2100 website: <https://www.czso.cz/csu/czso/projekce-obyvatelstva-ceske-republiky-2018-2100>
- DA. (2022a). Komunikace pracovníků sociálních služeb s rodinami klientů. Retrieved from Diakonická akademie website: <https://www.diaconicka-akademie.cz/kurzy-na-zakazku/komunikace-pracovniku-socialnich-sluzeb-s-rodinami-klientu-32/>
- DA. (2022b). *Komunikace s klienty*. Retrieved from <https://www.diaconicka-akademie.cz/kurzy-na-zakazku/komunikace-s-klienty-kteri-nekomunikuji-beznym-zpusobem-211/>
- Downe-Wamboldt, B. (1992). Content analysis: Method, applications, and issues. *Health Care for Women International*, 13(3), 313–321. doi: 10.1080/07399339209516006
- Gould, D., Kelly, D., White, I., & Chidgey, J. (2004). Training needs analysis. A literature review and reappraisal. *International Journal of Nursing Studies*, 41(5), 471–486. doi: 10.1016/j.ijnurstu.2003.12.003

GOV UK. (2013). *Delivering high quality, effective, compassionate care: Developing the right people with the right skills and the right values*. UK, London, Department of Health.

Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105–112. doi: 10.1016/j.nedt.2003.10.001

Graneheim, Ulla H., Lindgren, B.-M., & Lundman, B. (2017). Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today*, 56, 29–34. doi: 10.1016/j.nedt.2017.06.002

Grove, S. K., Burns, N., & Gray, J. (2013). *The practice of nursing research: Appraisal, synthesis, and generation of evidence* (7th ed). St. Louis, Mo: Elsevier/Saunders.

Holly, C., Bugel, M. J., Scuderi, D., Estrada, R. P., Harvey, J., Echevarria, M., ... Singer, A. (2014). *Scholarly Inquiry and the DNP Capstone*. Springer Publishing Company. Retrieved from <https://connect.springerpub.com/content/book/978-0-8261-9388-9>

Holmerová, I. (2014). *Dlouhodobá péče: Geriatrické aspekty a kvalita péče*. Praha: Grada.

Holmerová, I., Baláčková, N., Baumanová, M., Hájková, L., Hýblová, P., Janečková, H., ... Wija, P. (2013). Strategie České alzheimerovské společnosti P-PA-IA. *Geriatric a Gerontologie*, 2(3).

Kursch, M. (2021). *Skrytý potenciál virtuálního co-teachingu*. Retrieved from <https://www.prohuman.sk/pedagogika/skryty-potencial-virtualniho-co-teachingu>

Kusmaul, N. (2016). The content of education for direct caregivers. *Educational Gerontology*, 42(1), 19–24. doi: 10.1080/03601277.2015.1059142

Mcfarlane, L., & Mclean, J. (2003). Education and training for direct care workers. *Social Work Education*, 22(4), 385–399. doi: 10.1080/02615470309140

MLSA. (2006). 108/2006 Sb. Zákon o sociálních službách. Retrieved 29 March 2021, from *Zákony pro lidi* website: <https://www.zakonyprolidi.cz/cs/2006-108>

MoH. (2011). 372/2011 Sb. Zákon o zdravotních službách. Retrieved 29 March 2021, from *Zákony pro lidi* website: <https://www.zakonyprolidi.cz/cs/2011-372>

PHI. (2003). *Training Quality Home Care Workers*. Paraprofessional Healthcare Institute.

Price, S., & Reichert, C. (2017). The Importance of Continuing Professional Development to Career Satisfaction and Patient Care: Meeting the Needs of Novice to Mid- to Late-Career Nurses throughout Their Career Span. *Administrative Sciences*, 7, 17. doi: 10.3390/admsci7020017

Stone, R., & Harahan, M. F. (2010). Improving the long-term care workforce serving older adults. *Health Affairs (Project Hope)*, 29(1), 109–115. doi: 10.1377/hlthaff.2009.0554

Strandenaes, M. G., Lund, A., Engedal, K., Kirkevold, Ø., Selbaek, G., Benth, J. Š., & Rokstad, A. M. M. (2021). Self-reported quality of life in people with dementia attending a day-care programme in Norway: A 24-month quasi-experimental study. *Health & Social Care in the Community*. doi: 10.1111/hsc.13455

Svobodová, Z. (2021). Virtual Co-Teaching: Reflection, reality and potential. In J. Veteška & M. Kursch, *Adult Education 2020 – Reflection, Reality and Potential of the Virtual World: Proceedings of the 10th International Adult Education Conference (IAEC 2020), 16th December 2020, Prague* (pp. 36–43). Praha: Česká andragogická společnost.

Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, 15(3), 398–405. doi: 10.1111/nhs.12048

Veteška, J., Kursch, M., Svobodová, Z., Terckiová, M., & Paulovčáková, L. (2020). *Longitudinal co-teaching projects – scoping review*. 115–123.

Veteška, J., & Tureckiová, M. (2008). *Kompetence ve vzdělávání*. Praha: Grada.

WHO. (2020). Quality of Care. Retrieved 7 November 2020, from WHO website: [https://www.who.int/health-topics/quality-of-care#tab=tab\\_1](https://www.who.int/health-topics/quality-of-care#tab=tab_1)

## Acknowledgment

The project was supported by the Czech Health Research Council Project no. 18-09-00587 and the European Social Fund Project No. CZ.03.2.63/0.0/0.0/19\_099/0015144.

## Contact details:

Mgr. Vladimíra Dostálová, Ph.D.  
Centre of Expertise in Longevity and Long-term Care  
Faculty of Humanities, Charles University  
Pátkova 2137/5  
182 00 Praha 8, CZECH REPUBLIC  
E-mail: vladimira.dostalova@fhs.cuni.cz

---

# BASES OF INTERGENERATIONAL TRAINING IN TERTIARY AND FURTHER EDUCATION

---

Marianna Müller de Moraes, Ctibor Határ

## Abstract:

The study is an output of the authors from the KEGA project no. 005UKF-4/2021, entitled Developing social skills of learners in tertiary and further education. It has a theoretical-conceptual character. The authors base their work on intergenerational learning/education and social skills training or on the research in these fields, which have shown the positive impact of the mentioned activities on participants' personalities. These findings will become our initial source of knowledge for designing intergenerational social skills training for university students and seniors studying at the University of the Third Age (U3A).

## Key words:

Intergenerational training, intergenerational learning/education, social skills training, university students, U3A students, research.

## 1 INTRODUCTION

There is a wide range of opportunities to develop a person's social skills at every stage of their life, from childhood through adulthood to old age. Unquestionably, these include social skills training and intergenerational learning or education (compare e.g. Határ, 2019; Határ & Jedličková, 2017; Hupková, 2010; Jedličková, 2016; Müller de Moraes & Rapsová, 2019; Rapsová, 2019; Zímanová, 2019; Zímermanová, 2012, and others). Therefore, in our study, we focus on selected research works related to the topic of our work and anchored exclusively in educational sciences (pedagogy and andragogy). We aim to identify the positives of the implemented training and intergenerational programmes, respectively their impact on the overall development of the personality and various social skills in the participants. We monitored the

following social skills: *interactional skills, perceptual skills, communicative skills, organisational skills and behavioural skills* (Řezáč, 1998, in: Hupková, 2010, p. 10).

The study presents an analysis of the conducted research works as a basis for the design of future intergenerational training of social skills in university students in formal education (with an emphasis on students of andragogy, or adult education) and seniors studying at the University of the Third Age (non-formal education). We consider combining the benefits of social skills training and intergenerational education into one joint programme to be an optimal tool for developing learners' personalities.

## 2 INTERGENERATIONAL LEARNING/EDUCATION AND SOCIAL SKILLS TRAINING – A CONCEPTUAL ANALYSIS

Practical experience and research results show that social skills can best be developed in a targeted way within a small social group, through group training (more: Hermochová, 1991; Müller de Moraes & Rapsová, 2017, 2018; Hupková & Zimermanová, 2013). In this context, we can encounter several variants of training programmes, implemented with different target groups and with different names, such as social-psychological training, psychosocial training, or social training. There also exist different types of training programmes aimed at developing specific areas, such as self-knowledge, communication skills, conflict resolution, coping with stressful situations, and others.

We view social skills training in line with the work of Hermochová (1991), Komárková, Slaměník & Výrost et al. (2001), Popelková & Zatl'ková (2009), and others, as training and refinement of social skills, which requires a complex integration of understanding or insight (thinking), experiencing (emotions), new attitudes (choice) and action (expression). It is a practical activity that purposefully supports the social learning process based on personal, interpersonal experience and the accompanying emotional experience. It consists primarily in the purposeful and organised development of elements of social behaviour (social skills) and the increase of individuals' social competences.

Social skills training assumes that a social learning process occurs in every group interaction as a model social situation. After thorough practice and consolidation, the acquired social skills and learned elements of social behaviour are transferred from the model situation to real life. Its general aim is to develop participants' personal capacities and individual potential, their social skills in the field of interpersonal perception, sensitivity, emotional self-expression, verbal and non-verbal communication, cooperation, assertiveness, effective conflict resolution, self-regulation of behaviour, responsibility and other elements of overall social competence (more in detail Hupková, 2010, 2011).

Intergenerational learning or intergenerational education has been and is being addressed by several authors, such as Antz et al. (2009); Boström & Schmidt-Hertha (2017); Franz et al. (2009); Franz & Scheunpflug (2009); Haškovcová (2010); Határ, Jedličková & Müller de Moraes (2017); Jedličková (2016, 2017b); Rabušicová et al. (2011); Rabušicová et al. (2016); Schmidt & Tippelt (2009) and others. Rabušicová et al. (2016, p. 17-18) state that intergenerational learning can be intentional and unintentional, conscious and unconscious, sensorimotor, verbally cognitive and social, lifelong and about the whole life; formal, non-formal and informal. Intergenerational learning differs from other types of learning, primarily in the participation of persons from different generations.

Franz et al. (2009, p. 79-80) divided intergenerational projects implemented in practice into three categories, namely:

- a) projects that are about the (meeting) relationship between grandparents and grandchildren,
- b) projects where the (meeting) relationship between pupils/students/apprentices/employed youth and seniors (without family ties) is involved,
- c) projects that are about the (meeting) relationship between different generations and age groups.

Our study's intergenerational social skills training will fall into the second category of projects. The didactic-methodological recommendations, which, e.g. Paulweber & Platter (2018) mention in their work, can also be used to design intergenerational educational activities.



### 3 ANALYSIS OF CHOSEN RESEARCH WORKS OF INTERGENERATIONAL LEARNING/EDUCATION AND SOCIAL SKILLS TRAINING

Research on social training confirms its effects in coping with a diverse range of specific social situations and solving social-psychological problems. The positive effect of developmental programmes on personal and interpersonal characteristics in adepts of helping professions is confirmed by several authors (Bratská, 2000, 2001; Hamranová, 2003; Kráľová et al., 2017; Macková, 2008; Hupková & Zimermanová, 2013; Popelková, Sollárová & Zat'ková, 2003; Popelková & Zat'ková, 2009; Sollárová & Popelková et al., 2001, and others).

The subject of our analysis was a priori four research works, carried out within the framework of doctoral studies in the pedagogy and andragogy study programmes. Two of them focused on intergenerational learning/education (Zimermanová, 2012 and Jedličková, 2016) and two on the training of social and personal skills (Rapsová, 2019 and Zimanová, 2019).

Zimermanová (2012) defined four research objectives in her research, namely: to identify and analyse the psychosocial and spiritual needs of the clients (respondents); to determine the level of quality of life of the clients (respondents) before and after the implementation of the cooperative programme; to determine the subjective well-being of the senior respondents. The research sample consisted of 7 children from the orphanage and 14 seniors (7 formed the experimental group and 7 formed the control group) from the facility for the elderly. She used the quasi-experimental method, structured interview, Slovak Quality of Life Index (part: satisfaction with personal life), Habitual Subjective Well-being Questionnaire, unstructured observation and case study<sup>13</sup>.

The cooperative programme, also based on other authors<sup>14</sup>, consisted of 10 meetings, each with different content. Activities to develop interactional, communicative and perceptual skills were predominant. Through structured interviews, the author

<sup>13</sup> Zimermanová (2012, p. 84-85, 152-153) also lists the authors of the research instruments used, or parts of them, as follows: the Slovak Quality of Life Index by Cummins et al. (2001) with translation by Džuka (2002) and the Habitual Subjective Well-being Questionnaire by Džuka & Dalbert (2002) - the author also refers to Balogová (2005).

<sup>14</sup> Zimermanová (2012, p. 89-90) states that she based her work on Matula (1999) and Lednická (1999).

found that both parties positively received the meetings (Zimermanová, 2012, p. 98-100). Based on her findings, the author recommends forming training groups with the assumption of mutual cooperation and taking into account the clients' specific needs (children and seniors) (Zimermanová, 2012, p. 134). We deal with other results of the author's research in the paper „Intergenerational Learning in the Facilities of Social Services for Seniors (with Health Disadvantage)“ (Határ & Jedličková, 2017). The author also published selected results of her work in the study „Cooperation between Children and Seniors and Its Impact on the Quality of Life in Residential Care Conditions“ (Zimermanová, 2013). Lenhardtová et al. (2015) and Fuchsová & Kapová (2020) also conducted similar research.

Jedličková (2016) focused her research on intergenerational learning in the family environment (grandparents and grandchildren) to prevent aggressive behaviour in grandchildren. She defined five partial research objectives, namely 1) to analyse the course of intergenerational learning in individual families; 2) to find out the type of family educator-grandparent; 3) to find out the used methods of intergenerational learning; 4) to analyse the factors influencing the periodicity and implementation of intergenerational learning; 5) to analyse the three-generation view of grandparents (elementary school and secondary school student, university student). The research sample consisted of:

- 21 primary school students, 19 secondary school students and 15 university students who wrote an essay (My Grandparent and Me). She used the content analysis of textual documents;
- 5 families at risk. The author used a case study and a semi-structured interview;
- 172 pupils of the 8th grade at primary schools, the author used a self-constructed questionnaire.

From the author's research results, we select the following findings: learning between grandparents and grandchildren mitigates or eliminates selected inappropriate behavioural manifestations, i.e. aggression, except for self-aggression, for which the relationship was not statistically confirmed. However, the author believes that intergenerational learning increases self-esteem and positive self-perception and improves social skills, thus preventing self-aggression (Jedličková, 2016, p. 149-150). The author also found that grandparents (respondents) transmit several values to their grandchildren (faith, religion, respect for parents and older people,

diligence, orderliness, gratitude, responsibility, cooperation, and others). They teach their grandchildren to have pro-social behaviour, good relations with siblings and people from their surroundings, and acceptance of life's setbacks while contributing to the development of their communication skills (Jedličková, 2016, p. 152). We deal with other results of the author's research in the paper „Intergenerational Learning in the Facilities of Social Services for Seniors (with Health Disadvantage)“ (Határ & Jedličková, 2017). The author has also published selected results of her work in the study „Intergenerational learning as prevention against aggressive behaviour“ (Jedličková, 2017a) and also in her monograph (Jedličková, 2017b).

Rapsová (2019) experimentally validated a training programme designed for a group of cultural workers to develop their social skills and thus enhance their professional competences. The training programme was designed on the characteristic and specific features of the work of cultural workers. It took into account participants' individual goals and expectations, the necessary personal prerequisites, and all the requirements placed on the performance of this profession, not excluding the increased need for the development of social competences of these workers. The training programme consists of 10 eight-hour sessions thematically focused on the following social skills: social perception, social communication, assertiveness, solving conflict situations, coping with demanding situations.

The author implemented an 80-hour training programme in the experimental groups to develop social skills for half a year. The research focused on experimental verification of the effectiveness of the proposed training with two experimental (N=21) and two control groups (N=21). Measurements of the dependent variable were taken before and after the experimental intervention. Other complementary methods were the interview and observation<sup>15</sup>. The research results confirmed the assumptions about the training programme's impact on personality and interpersonal variables that contribute to individuals' successful and effective functioning in a dynamic and ever-changing social environment. It is possible to interpret these findings in a shift in participants' behaviour towards more adaptive forms that better fulfil their social and occupational roles.

---

15 Rapsová (2019, p. 110-111) reports that she used the following research instruments: the NEO-FFI questionnaire by Ruisel & Halama (2007), the Interpersonal Diagnosis Questionnaire ICL by Kožený & Ganický (1976), the modified Yalom questionnaire (adapted from Kratochvíl, 2009), and the modified Rogers questionnaire (1997).

In the experimental group that received the training, there was a statistically significant increase in the values of the personality factors (as measured by the NEO-FFI questionnaire) E (extraversion) and P (agreeableness) at the 0.01 level of significance, an increase in the values of the variables O (openness to experience) and S (conscientiousness) at the 0.05 level of significance, and a decrease in the values of the variable N (neuroticism) at the 0.01 level of significance. Further, there was a statistically significant decrease in the values (Interpersonal Diagnosis Questionnaire ICL) in the octants DE (aggression and hostility), FG (distrustful resistance), HI (submissiveness) and JK (weak dependence) and a statistically significant increase in the values in the octants BC (self-assertiveness) and LM (affiliation) at the 0.01 level of significance. The results of the reflections on the training, through a modified Rogers questionnaire, show a significant effect of the training on the behavioural and emotional side of the participants' personalities.

Almost 80 % of the participants reported significant positive changes in behaviour that occurred just by completing the training. In four cases (19 %), participants mentioned a short-term change, and none of the participants reported the change in behaviour as negative. The positive behavioural changes identified by the participants occurred mainly concerning the participants in the cultural and counselling education (31 %), colleagues (25 %), friends (15 %), family members and subordinates (12 %), and towards supervisors (5 %). For almost half of the research participants, the training led to constructive change and a meaningful experience; the others spoke mainly of a rewarding experience in this regard. From the subjective evaluation, there was also a positive change trend towards awareness of one's feelings and other people's feelings from one's social environment (Rapsová, 2019). The author published selected results of her work in the study „Influence of the social competence training on personality variables“ (Rapsová, 2021).

Zimanová (2019) verified the effect of an emotional intelligence training programme in a selected group of cultural education participants. Within the framework of training work with adults in their leisure time, the programme intended to develop the individual factors of trait emotional intelligence and improve those qualities that have already been acquired sometime in learning and education. The research aimed: 1) to determine whether the emotional intelligence training programme contributes to the development of selected factors of trait emotional intelligence (as measured by the TEIQue questionnaire) in adult cultural education participants.

2) To determine the effects of the emotional intelligence training programme on cultural education participants.

The design of the training programme was based on different models of emotional intelligence<sup>16</sup> that emphasised emotional and interpersonal skills as parts of emotional intelligence. Emotional intelligence factors represent a trait, and according to them, an emotional intelligence development programme was designed and conceived in four block sessions. The programme lasted for forty hours (educational activities promoting the development of trait emotional intelligence: well-being, emotionality, sociability and self-control). The research focused on experimental validation of the effectiveness of emotional intelligence training with two experimental (N=16) and two control groups (N=16). All groups were tested before and after the experimental intervention using the modified Trait Emotional Intelligence Questionnaire TEIQue-SF. Furthermore, a modified Yalom questionnaire and a self-constructed<sup>17</sup> questionnaire were administered.

Based on the research results, it is possible to conclude that emotional intelligence training contributed to developing individual factors of trait emotional intelligence. The trait emotional intelligence questionnaire demonstrated an effect for the participants in the well-being and sociability factors (for the participants of both experimental groups). The exposure to the training programme also increased (for participants in the first experimental group) the global level of trait emotional intelligence at the 0.05 level of significance. The research results also show that the training programme affected the cultural education participants in different areas. It is possible to see these effects, especially in the elimination of barriers in creating, building and developing interpersonal relationships, communication, conflict resolution, as well as in the area of assertiveness, experiencing feelings of happiness, optimism, life satisfaction, the ability to express and name one's emotions, in the area of empathy and other skills (Zimanová, 2019).

## 4 INSTEAD OF CONCLUSION

Well-implemented training can significantly support personality development and thus help participants in self-knowledge, social interaction and communication, adequate self-assertion, conflict resolution and coping with stressful situations, achievement of personal goals, self-realisation, and others. Recently, the linking of professional human assistance disciplines and theories has become more noticeable, intending to find more effective ways of intervention.

The linking is based on recognising and finding common features and practices. One approach that creates the conditions for effective bridging is eclecticism. The eclectic approach in training work tries to adopt effective practices from different directions and schools (Popelková & Zat'ková, 2009). Eclecticism represents the basis for the design of future intergenerational training of a structured type, aimed at developing selected social skills in university students (in formal education) and seniors (participants of non-formal education at the University of the Third Age).

The training programme, based on social and intergenerational learning, aims to develop social skills, increase self-esteem and motivational factors in both generations. It is possible to expect several benefits can from this training. Both generations develop the ability to learn, their relationships with each other improve, the seniors become a support for the younger ones in moments of difficulties and problems, the younger generation changes their attitudes towards the elderly (Sánchez Martínez et al., 2010, in: Jedličková, 2019).

---

<sup>16</sup> Zimanová (2019, p. 12) states that she drew on Bar-On (1997), Goleman (1995) and Petrides (2009).

<sup>17</sup> Zimanová (2019, p. 82) also lists the authors of the research instruments used as follows: the Trait Emotional Intelligence Questionnaire TEIQue-SF by Petrides (2009), modified by Kaliská & Nábělková (2015), and the modified Yalom questionnaire (adapted from Kratochvíl, 2009).

## References

- Antz, E. M., Franz, J., Frieters, N., & Scheunpflug, A. (2009). *Generationen lernen gemeinsam. Methoden für die intergenerationelle Bildungsarbeit*. Bielefeld: W. Bertelsmann Verlag. [https://www.ssoar.info/ssoar/bitstream/handle/document/55927/ssoar-2009-antz\\_et\\_al-Generationen\\_lernen\\_gemeinsam\\_Methoden\\_fur.pdf?sequence=1&isAllowed=y&lnkname=ssoar-2009-antz\\_et\\_al-Generationen\\_lernen\\_gemeinsam\\_Methoden\\_fur.pdf](https://www.ssoar.info/ssoar/bitstream/handle/document/55927/ssoar-2009-antz_et_al-Generationen_lernen_gemeinsam_Methoden_fur.pdf?sequence=1&isAllowed=y&lnkname=ssoar-2009-antz_et_al-Generationen_lernen_gemeinsam_Methoden_fur.pdf)
- Balogová, B. (2010). Medzigeneračné vzťahy v rodine – testament ako prostriedok medzigeneračného posolstva. In Žumárová, M., & Balogová, B. *Medzigeneračné mosty*. Košice: MENTA MEDIA, pp. 67 – 81.
- Balogová, B. (Ed.). (2012). *Medzigeneračné mosty : vstupujeme do roka medzigeneračnej solidarity*. Prešov: Prešovská univerzita.
- Baltes, P. B. (Ed.) et al. (1994). *Alter und Altern. Ein interdisziplinärer Studententext zur Gerontologie*. Berlin: Walter de Gruyter.
- Boström, A.-K., & Schmidt-Hertha, B. (2017). Intergenerational Relationships and Lifelong Learning. *Journal of Intergenerational Relationships*, 15(1), 1-3. <https://www.tandfonline.com/doi/pdf/10.1080/15350770.2017.1260408?needAccess=true>
- Bratská, M. (2000). Skúsenosti s programom Konštruktívne riešenie a zvládanie záťažových situácií u vysokoškolákov. In *Preventívne programy pre III. tisícročie: Teoretické prístupy a praktické skúsenosti v prevencii sociálnej patológie*. Bratislava: Národné osvetové centrum, pp. 93-99.
- Bratská, M. (2001). *Zisky a straty v záťažových situáciách alebo príprava na život*. Bratislava: Trade Leas.
- Čerešní, M., Domankušová, H., Gatial, V., & Juhásová, A. (2014). *Psychológia tretieho veku*. Nitra: Univerzita Konštantína Filozofa.
- Franz, J., Frieters, N., Scheunpflug, A., Tolsdorf, M., & Antz, E. M. (2009). *Generationen lernen gemeinsam. Theorie und Praxis intergenerationeller Bildung*. Bielefeld: W. Bertelsmann Verlag. [https://www.ssoar.info/ssoar/bitstream/handle/document/55928/ssoar-2009-antz\\_et\\_al-Generationen\\_lernen\\_gemeinsam\\_Theorie\\_und.pdf?sequence=1](https://www.ssoar.info/ssoar/bitstream/handle/document/55928/ssoar-2009-antz_et_al-Generationen_lernen_gemeinsam_Theorie_und.pdf?sequence=1)
- Franz, J., & Scheunpflug, A. (2009). Zwischen Seniorität und Alterität. Eine empirische Rekonstruktion intergenerationellen Lernens. *Zeitschrift für Erziehungswissenschaft*, 12(3), 437-455. <https://link.springer.com/content/pdf/10.1007/s11618-009-0084-0.pdf>
- Fuhr, T., Gonon, Ph., & Hof, Ch. (Eds.). (2010). *Erwachsenenbildung - Weiterbildung. Handbuch der Erziehungswissenschaft 4*. Stuttgart: UTB GmbH.
- Fuchsová, K., & Kapová, J. (2020). Kooperácia detí a seniorov optikou výskumu. *Lifelong Learning – celoživotní vzdělávání*, 10(2), 157-173. [https://lifelonglearning.mendelu.cz/media/pdf/LLL\\_20201002157.pdf](https://lifelonglearning.mendelu.cz/media/pdf/LLL_20201002157.pdf)
- Gracova, D., Spulber, D., & Selecky, E. (2017). *Universities of the Third Age in Europe*. Roma: Carocci editore S.p.A.
- Hamranová, A. (2003). Možnosti využitia sociálno-psychologického výcviku v pregraduálnej príprave učiteľov a vychovávateľov. In *Mládež a spoločnosť*, 9(3), 62-67.
- Haškovcová, H. (2010). *Fenomén stáří*. 2. vydanie. Praha: HBT.
- Határ, C. (2019). Sociálna komunikácia seniorov. *XLinguae*, 12(3), 3-11. [http://www.xlinguae.eu/files/XLinguae3\\_2019\\_1.pdf](http://www.xlinguae.eu/files/XLinguae3_2019_1.pdf)
- Határ, C., & Jedličková, P. (2017). Medzigeneračné učenie v zariadeniach sociálnych služieb pre seniorov (so zdravotným znevýhodnením). In Veteška, J. (Ed.). *Vzdělávání dospělých 2016 – východiška a inspirace pro teorii a praxi*. Praha: Česká andragogická společnost, pp. 25-34.
- Határ, C., Jedličková, P., & Müller de Moraes, M. (2017). Foreign language education to seniors through intergenerational programmes. *JoLaCE*, 5(1), 103-117. <https://www.sciendo.com/article/10.1515/jolace-2017-0006>
- Hermochová, S. (1991). *Metody aplikované sociální psychologie IV*. Praha: Univerzita Karlova.
- Hrapková, N. (2011). Štúdium na univerzitách tretieho veku – podpora kvality života. <https://adoc.pub/tudium-na-univerzitach-tretieho-veku-podpora-kvality-ivota.html>
- Hupková, M. (2010). *Rozvíjanie sociálnych spôsobilostí v pomáhajúcich profesiách*. Nitra: Univerzita Konštantína Filozofa v Nitre.
- Hupková, M. (2011). Sociálna kompetencia ako jedna z kľúčových kompetencií andragóga a vybrané možnosti jej rozvíjania. In *Teorie a praxe kompetenčního přístupu ve vzdělávání*. Praha: Educa Service, 121-170.



- Hupková, M., & Zimermanová, M. (2013). Sociálno-psychologický výcvik pre seniorov v kontexte celoživotného vzdelávania. In *Vzdělávání dospělých - příležitosti a úskalí v globalizovaném světě*. Praha: Educa Service, pp. 263-274.
- Jedličková, P. (2017a). Intergenerational learning as prevention against aggressive behaviour. *AD ALTA*, 7(2), 92-98. [http://www.magnanimitas.cz/ADALTA/0702/papers/A\\_jedlickova.pdf](http://www.magnanimitas.cz/ADALTA/0702/papers/A_jedlickova.pdf)
- Jedličková, P. (2019). Medzigeneračné učenie ako forma prevencie agresívneho správania. *Prohuman*, 7. <https://www.prohuman.sk/pedagogika/medzigeneracne-ucenie-ako-forma-prevencie-agresivneho-spravania>
- Jedličková, P. (2016). *Medzigeneračné učenie ako prevencia sociálno-patologických javov. Dizertačná práca*. Nitra: Univerzita Konštantína Filozofa v Nitre. <https://opac.crzp.sk/?fn=docviewChild00084FD8>
- Jedličková, P. (2017b). *Medzigeneračné učenie v rodinnom prostredí ako prevencia agresívneho správania u detí*. Nitra: Univerzita Konštantína Filozofa v Nitre.
- Komárková, R., Slaměník, I., & Výrost, J. (Eds.). (2001). *Aplikovaná sociální psychologie III. Sociálněpsychologický výcvik*. Praha: Grada Publishing.
- Kráľová, Z. et al. (2017). Znižovanie úzkosti študentov učiteľstva cudzieho jazyka vo výslovnosti prostredníctvom psycho-sociálneho výcviku. *System*, 65, 49-60. DOI: 10.1016/j.system.2017.01.001.
- Lenhardtová, M. et al. (2015). *Kooperatívna edukácia detí a seniorov v rezidenčných zariadeniach*. Prešov: Prešovská univerzita.
- Macková, K. (2008). Intervenčný program na zvyšovanie pozitívneho sebaobrazu a sociálnych spôsobilostí budúcich učiteľov. *e-PEDAGOGIUM*, 8(2), 32-53. <https://e-pedagogium.upol.cz/pdfs/epd/2008/02/04.pdf>
- Müller de Morais, M., & Rapsová, L. (2017). Perspektívy a špecifiká rozvíjania sociálnych spôsobilostí zdravotne znevýhodnených dospelých a seniorov v zariadeniach sociálnych služieb. In *Vzdělávání dospělých 2016 - východiska a inspirace pro teorii a praxi*. Praha: Česká andragogická společnost, pp. 35-48.
- Müller de Morais, M., & Rapsová, L. (2019). Psychological bases of developing social competences of seniors with disability. *Australian Journal of Adult Learning*, 59(2), 269-292.
- Müller de Morais, M., & Rapsová, L. (2018). *Tréning sociálnej kompetencie dospelých a seniorov so zdravotným postihnutím*. Praha: Česká andragogická společnost.
- Müller de Morais, M., & Zimanová, R. (2017). Rozvíjanie emocionálnej inteligencie účastníkov kultúrno-osvetovej edukácie. In *Vzdělávání dospělých 2016 - východiska a inspirace pro teorii a praxi*. Praha: Česká andragogická společnost, pp. 145-155.
- Nedělka, M., & Veteška, J. (2018). Specifika vzdělávání seniorů v rámci univerzity třetího věku: androdidaktické a motivační faktory. In *Vzdělávání dospělých 2017 – v době rezonujících společenských změn*. Praha: Česká andragogická společnost, pp. 213-220.
- Paulweber, U., & Platter, M. (2018). *Factsheet: Intergenerationelle Methodik und Didaktik*. Wien: Bundesministerium für Arbeit, Soziales, Gesundheit und Konsumentenschutz. <https://www.lifelong-learning.at/Wordpress/wp-content/uploads/2021/01/15.-Factsheet-Intergenerationelle-Methodik-und-Didaktik.pdf>
- Popelková, M., Sollárová, E., & Zaťková, M. (2003). *Intervenčné programy v príprave pracovníkov v pomáhajúcich profesiách*. Nitra: Univerzita Konštantína Filozofa.
- Popelková, M., & Zaťková, M. (2009). *Podpora rozvoja osobnosti a intervenčné programy*. Nitra: Univerzita Konštantína Filozofa.
- Rabušicová, M., Brücknerová, K., Kamanová, L., Novotný, P., Pevná, K., & Vařejková, Z. (2016). *Mezigenerační učení. Teorie, výzkum, praxe*. Brno: Masarykova univerzita.
- Rabušicová, M., Kamanová, L., & Pevná, K. (2011). *O mezigeneračním učení*. Brno: Masarykova univerzita.
- Rapsová, L. (2021). Influence of the social competence training on personality variables. *AD ALTA*, 11(1), 245-249. [http://www.magnanimitas.cz/ADALTA/1101/papers/A\\_rapsova.pdf](http://www.magnanimitas.cz/ADALTA/1101/papers/A_rapsova.pdf)
- Rapsová, L. (2019). *Sociálne spôsobilosti pracovníkov v kultúrno-osvetovej edukácii dospelých. Dizertačná práca*. Nitra: Univerzita Konštantína Filozofa v Nitre. <https://opac.crzp.sk/?fn=docviewChild00086083>
- Schmidt, B., & Tippelt, R. (2009). Bildung Älterer und intergeneratives Lernen. *Zeitschrift für Pädagogik*, 55(1), 73-90. [https://www.pedocs.de/volltexte/2011/4239/pdf/ZfPaed\\_2009\\_1\\_Schmidt\\_Tippelt\\_Bildung\\_Aelterer\\_D\\_A.pdf](https://www.pedocs.de/volltexte/2011/4239/pdf/ZfPaed_2009_1_Schmidt_Tippelt_Bildung_Aelterer_D_A.pdf)
- Siri, A., Spulber, D., & Bragazzi, N. L. (2017). *Teaching Older Adults. European and Trans-European Experience*. Roma: Carocci editore S.p.A.

Sollárová, E., & Popelková, M. et al. (2001). Vplyv štruktúrovaných a neštruktúrovaných výcvikových programov na skupinovú atmosféru. In Školská psychológia - intervenčné programy zamerané na rozvoj osobnosti. Nitra: Univerzita Konštantína Filozofa, pp. 41-58.

Švec, Š. (2008). *Anglicko-slovenský lexikón pedagogiky a andragogiky*. Bratislava: Iris.

Švec, Š. (Ed.). (2015). *Slovenská encyklopédia edukológie*. Bratislava: Univerzita Komenského.

Verešová, M. et al. (2014). *Zvyšovanie kvality ďalšieho vzdelávania seniorov na univerzite tretieho veku*. Nitra: Univerzita Konštantína Filozofa v Nitre.

Vostrý, M., & Veteška, J. et al. (2021). *Kognitívni rehabilitace seniorů. Psychosociální a edukační souvislosti*. Praha: Grada.

Zimanová, R. (2019). *Rozvoj emocionálnej inteligencie dospelých účastníkov kultúrno-osvetovej edukácie. Dizertačná práca*. Nitra: Univerzita Konštantína Filozofa v Nitre. <https://opac.crzp.sk/?fn=docviewChild00086710>

Zimmermanová, M. (2013). Cooperation between Children and Seniors and Its Impact on the Quality of Life in Residential Care Conditions. *The New Educational Review*, 33(3), 19-32.

Zimmermanová, M. (2012). *Kooperácia detských domovov a zariadení pre seniorov ako determinant zvyšovania kvality života klientov. Dizertačná práca*. Nitra: Univerzita Konštantína Filozofa v Nitre. <https://kis.ukf.sk/Prace/2012/Z/6B6BCF1B86BF475EA425E42E89BB0E94.pdf>

#### Contact details:

doc. PaedDr. Marianna Müller de Morais, PhD.  
prof. PaedDr. Ctibor Határ, PhD.  
Department of Pedagogy  
Faculty of Education  
Constantine the Philosopher University in Nitra  
Drážovská 4  
949 74 Nitra, SLOVAKIA  
E-mail: mmdmorais@ukf.sk, chatar@ukf.sk

## CO-TEACHING IN THE EDUCATION OF PUPILS WITH SPECIAL EDUCATIONAL NEEDS

Wanda Tureckiová

#### Abstract:

The text is devoted to the issue of co-teaching (in Czech also sometimes called as pair teaching or tandem teaching). The article presents definitions of this model of teaching and the different strategies that can be encountered in practice. It also specifically addresses the use of co-teaching for students with special educational needs. The author then presents research on co-teaching in the Czech Republic and abroad. These focus on pupils with special educational needs, their classmates and teachers.

#### Key words:

Bilingual education, co-teaching, hearing impairment, inclusive education, pupils with special educational needs,

## 1 INTRODUCTION

The collaboration of multiple teachers who plan, organize and implement learning together within a single classroom team is called co-teaching. This teamwork of multiple professionals is not only seen in mainstream schools, it is also encountered in special schools for pupils with special educational needs. Thus, not only can a teacher work with another teacher (as is the case, for example, in the bilingual approach in education for pupils with hearing impairments), a teaching assistant may also be present, or perhaps a novice teacher who is being trained by another teacher.

Co-teaching and its different strategies not only allow for the involvement of more teachers, but also for the differentiation of the different teaching methods. These can then suit a larger number of pupils. This type of team teaching can be used



throughout the teaching day or only in certain subjects. A more detailed description of the methods and uses of co-teaching in practice will be discussed in more detail in this text.

## 2 CO-TEACHING – DEFINITION OF THE TERM

According to Bacharach & al. (2007), the term is used to refer to education in which two teachers work together with a group of students. Together they plan, organize, implement, and also share the assessment and the overall flow of the teaching day. (Bacharach & al, 2007, In: Immonen & Kinnunen, 2015)

Villa & al. take a similar view of this type of teaching (2013, In: Piovesan, 2016), the latter view co-teaching as the shared responsibility of two or more persons for teaching selected or all students in a classroom. The authors also understand co-teaching as planning, teaching and assessment – all of which, are shared between the persons involved.

According to Cook & Friend (1995, In: Lusk, Sayman, Zolkoski, Carrerro & Lewis-Chui, 2016), co-teaching takes several forms, using different models of approach to teaching. They are divided into the following individual strategies:

### a) One teach, one observe

One teacher leads the lesson while the other teacher observes and collects data on how students respond to the different exercises and teaching models.

### b) One teach, one assist

From the pair of teachers, one teacher is selected to have the main responsibility for teaching, while the other is available to assist the students if needed.

### c) Station teaching

The teaching of individual subjects is usually divided into two (or three) stations. The two teachers involved divide the material and always discuss their part of the material with the students at the stations. For older pupils, we can also use a third station, where pupils can work independently or in groups without the presence of the teacher.

### d) Parallel Teaching

Teachers divide students into two groups and each teacher leads one group. In this way, they both give the identical information at the same time.

### e) Alternative Teaching

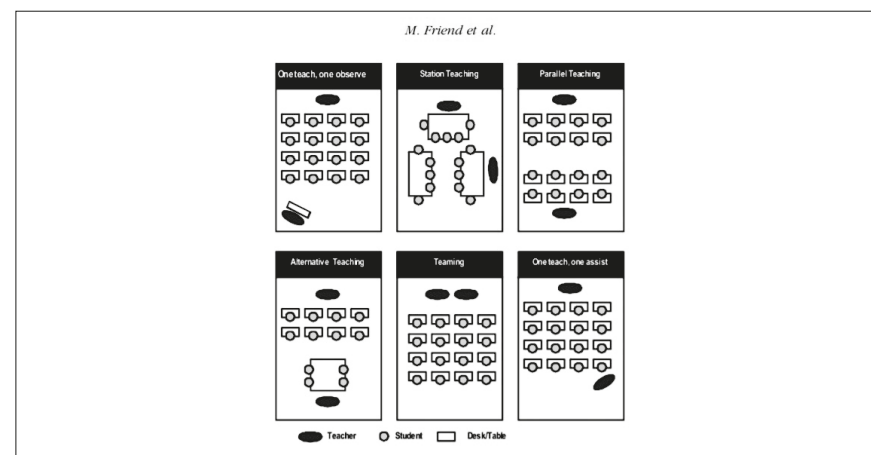
One teacher works with a smaller group of students (e.g. 3-8 students) while the other teacher works with the rest of the class. This type of teaching is useful when the school is attended by pupils with special educational needs who need more individualised work with the teacher. Alternatively, if we were responding to the current epidemiological situation, we could use this model of teaching to review the curriculum, e.g. for those pupils who have been ill/returned from quarantine.

### f) Team teaching (Teaming)

Teachers take turns in teaching and provide the same content to the pupils. Thus, there is always one lead teacher in the classroom and the other teacher is taking lesson notes, demonstrates a concept or is preparing for his/her teaching content.

These methods and the distribution of the roles and positions of the different actors in co-teaching are illustrated in Figure 1.

Figure 1: Co-teaching strategies



Zdroj: Friend & Bursuck, (2009, p. 92, In: Friend, Cook, Hurley-Chamberlain & Shamberger, 2010, p. 12)

Within these six approaches, teachers can also address the aims and objectives of the individual learning programme of pupils with disabilities, while working with the learning needs of other pupils in the classroom. Teachers' roles are variable within co-teaching. All those involved take on some of the responsibilities based on the co-teaching model, sharing the preparation part and the implementation part of teaching. (Friend, Cook, Hurley-Chamberlain & Shamberger, 2010)

The moment we decide to choose any method of co-teaching, we need to clearly define the different roles of the teachers – properly defining what each teacher is responsible for and remembering that they are equal. However, the pupils themselves must feel the same way, regardless their abilities, special educational needs and necessary support within the classroom.

Co-teaching (in Czech, the term is also sometimes translated as pair teaching, tandem teaching) is practiced in several schools in the Czech Republic in various forms. On the page of the Regional Action Planning Project, we are introduced to practical examples where a professional is involved in tandem teaching alongside the teacher – for example, a lawyer in the subject of Fundamentals of Social Sciences or a fashion designer working with students of Fashion Design and Accessories. (National Institute of Education, n.d.)

Tandem teaching and its training are also taught by lecturers Burdová and Najbrt. Their courses (accredited by the Ministry of Education and Science) - Two Teachers, One Class – Tandem and Attitudinal Outcomes of the RVP and the Tandem Learning Programme, focus on the theoretical background of this type of teaching and highlight the practical use of this method at the first level of primary school. (Tandem Learning, 2018)

The Department of Andragogy and Management of Education at the Faculty of Education of Charles University is also dedicated to co-teaching within the project A New Method of Education for the 21st Century: Virtual-Co-Teaching (TA ČR). The project focuses not only on classical, but also on virtual co-teaching and their use in school practice (the issue is further addressed, for example, in Kursch, 2021; Svobodová, Kursch, & Veteška, 2021)

In addition, Svobodová (2021) presents the use of co-teaching in primary schools in Germany. Here, the presence of special educators is already significantly more

common in inclusive schools, and they not only provide support to pupils, their families and teachers, but are also involved in the teaching – thanks to the co-teaching method.

Pair teaching (co-teaching) also appears as a topic in many final papers. Mičkalová (2021) focused on the use of tandem teaching in the subjects of mathematics and art education in her master's thesis, as did Moravcová (2020) on tandem teaching in the subject of mathematics. They agree that tandem teaching is becoming a suitable alternative to the usual frontal delivery of the school day and is well received by students and teachers.

### 3 CO-TEACHING – PUPILS WITH SPECIAL EDUCATIONAL NEEDS

In mainstream schools, we can encounter some form of co-teaching quite often, primarily the One Teacher, One Assistant type (where we are of course talking about teaching assistants). The teaching assistant may be assigned to a pupil for the whole of the school day, or may rotate between several pupils and share the support. In practice, however, we encounter many teaching assistants who may not have sufficient training to deliver a lesson independently, as tends to be the case with a university-educated paired teacher. However, a trained special educator with specific competences can also become a teaching assistant. The position of individual staff members within a team-based education (co-teaching) and the distribution of their competences should always be based on their educational background and acquired skills. (Beran & Doležilová, 2015)

In addition to the teaching assistant, a Czech sign language interpreter (or note taker etc.) may be present in some classes. This interpreter no longer has an educational function within the class, but only provides translation between the two communication systems. However, he or she also completes the overall course of education, and the implementation and organisational factors of teaching must be addressed with him or her. He must have the teaching materials in advance, as well as the interaction of all participants in the classroom space must be discussed. If the teacher and the assistant are walking around the classroom, the interpreter must be positioned correctly so that the student can see him/her clearly, but at the

same time does not miss out on possible interactions with the teacher (or assistant). (Michalík, Baslerová, Felcmanová & al., 2015)

Hall (2021) points out 3 key steps that can improve collaboration in an inclusive classroom setting:

1. Teachers work as a team and share their roles, which their students need to know. Both teachers (possibly in collaboration with the school's special education teacher) should be involved in student assessment, which should be based on student growth throughout the school year. The joint assessment will help to summarize the pupil's achievements as well as his/her challenges – this will enable the teachers to set further non-educational goals for the individual pupil, which, according to his/her development so far, he/she could reach in the future.
2. In teaching, they must work with all groups of pupils and not divide the same groups among teachers all the time. Rotating individual pupils within a group will give an overall view of the progress of the pupils in the group, teachers also work with groups who need more time (and therefore more work) and have additional special educational needs and use support measures.

This way of "rotating" the different groups in the classroom also benefits the pupils – the teachers look at the material from different angles and can discuss it with the pupils using different teaching methods.

3. In addition to the organisational and implementation components of teaching, co-teaching teachers should also divide the work with the class on problem behaviour. It should certainly not be the case that one teacher evaluates the class positively and the other only deals with problematic situations. When dealing with these situations, there must be a team approach, which again allows the problem to be seen from different angles and resolved in a way that is suitable for all the actors involved.

Hall applies these 3 key steps when a teacher and special educator are present, but they can certainly be applied when there are two teachers, a teacher and an assistant in the classroom.

In the education of pupils with hearing impairments, we encounter a modified form of team-based education - i.e. bilingual education. In this type of education, there is a pair of teachers – hearing and deaf. They work together in teaching, taking turns in explaining the material and working with the children. Both are carriers of one language system (hence the bilingual approach) - Czech language and Czech sign language, but also two cultures. For this reason, bilingual education is sometimes referred to as bicultural education; the hearing educator represents his/her culture, while the Deaf educator represents the culture of the Deaf – representatives of the linguistic and cultural minority. Thus, the joint action of these two educators brings closer the slightly different worlds of which the hearing impaired student may be a part. (Hádková, 2016)

Authors Compton, Stratton, Maier, Meyers, Scott & Tomlinson (1998) focused on co-teaching with trainees (students) in elementary schools with deaf/hard of hearing students. The co-teaching involved the use of the station-based teaching method in primary schools. The co-teacher and the student teacher were involved in the planning of mathematics or reading lessons – they also shared the teaching content together.

An alternative teaching approach was also used in the teaching – this method of co-teaching seemed to the actors involved to be extremely effective, and also efficient for meeting the needs of all pupils. Similarly, team teaching was used in the teaching, for example in a geography lesson – the co-teacher brought subject knowledge to the lesson, and the student enriched the lesson with their technological skills.

In the results, teachers were positive about the presence of the other teacher – a student teacher. Teachers were thus able to answer students' questions quickly, received more feedback, and were able to address students more individually according to their learning needs. The presence of the student teachers and their different teaching methods with the teachers also led to self-reflection on their teaching style. One of the respondents (among the teachers) reported that she had adapted her teaching to be more inclusive for pupils with special educational needs as a result of working with the intern.

On the other hand, the issue of planning was viewed negatively – either because there was not enough time for the trainees to plan detailed teaching or because it was really challenging to adapt the teaching to all the different groups. For the

students themselves, it was initially challenging to adjust to the presence of two teachers managing the class collective at different times.

Spörer, Bosse & Henke (2020) looked at the effect of co-teaching on pupils' social participation in primary education. In their investigation, they focused on the interaction between students, students and teachers, and they also investigated differences when it comes to students with special educational needs. Over the course of two school years, the research was conducted with a total of 247 students who were observed in class and their feelings were collected through questionnaires. The results showed that students with special educational needs felt less accepted in the collective. The presence of an additional teacher in the classroom led to significantly more involvement of all students in interactions with teachers, as well as an increase in individual students' self-esteem due to the additional teacher.

Strogilos & King-Sears (2018) worked with students with special educational needs and their classmates in their study. In addition, they supported their findings with statements from math, social studies, and biology teachers who participated in co-teaching. Both sides of the education process reported positive evaluations of the instruction and increased social interaction among students. However, this investigation also suggests that special educators are more likely to be in a supportive role and less in the forefront as lead teachers in the classroom.

In Germany, co-teaching has been addressed by Jurkowski, Ulrich & Müller (2020). They investigated the use of this teaching method in the presence of a regular teacher and a special educator. They based their research on interviews with teachers (17 regular educators and 16 special educators), and their questions were about their own experiences with co-teaching. The teachers were unanimous in their positive view of the co-teaching method. However, they also collectively attested to the need for more resources (either more time or more tools) and more materials for teaching in inclusive environments. Teachers also prove that for successful inclusive education, school management and experts outside the school (in the Czech Republic, we would consider these experts to be school counselling centres – special education centres and psychological and pedagogical counselling centres) must also be involved. Therefore, the successful implementation of co-teaching does not only depend on teachers, but on the overall development in the field of personnel and organisational structure.

Extensive research has been conducted by Walsh (2011). He tracked the implementation of co-teaching in education primarily for students with certain types of disadvantage over a period of 20 years. The author comes up with the claim that students with disabilities do better due to the increased availability of co-teaching in mainstream schools where they are successfully included. In addition, this model of instruction improves student achievement in math and language.

## 4 CONCLUSION

The use of individual co-teaching strategies is already common practice in schools abroad, and gradually this model of teaching is being introduced to a larger number of schools in the Czech Republic. According to the above mentioned research investigations, it seems evident that the introduction of co-teaching must be preceded by the overall development of the organisational and personnel structure – the selected teachers involved in the running of the lesson should be equal partners. The planning and organisation of co-teaching should be appreciated by the management, as teachers often work beyond their duties (most often due to time constraints).

Co-teaching and more teaching staff in the classroom affects the achievement and social interaction not only of pupils with special educational needs but also of their classmates. The smaller number of pupils per teacher allows the needs of the whole class to be individualised. In the future, it would be advisable to promote more cooperation with special educators in the role of teaching assistants, who bring knowledge of the specific needs of pupils with particular types of disadvantage to mainstream schools. Similarly, it would be appropriate to introduce co-teaching strategies and their use in schools into the teaching of universities preparing future teachers.

## References

- Beran, V. & Doležilová, V. (8.3.2015). *Párová výuka v podnětech, otázkách a odpovědích*, ZŠ Kunratice. <https://www.zskunratice.cz/rodice/patron-spolek-rodicu/parova-vyuka/parova-vyuka-v-podnetech-otazkach-a-odpovedich>
- Compton, M. V., Stratton, A., Maier, A., Meyers, C., Scott, H. & Tomlinson, T. (1998). *It takes two: Co-teaching for deaf and hard of hearing students in rural schools*, CiteSeerX. <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.828.701&rep=rep1&type=pdf>
- Friend, M., Cook, L., Hurley-Chamberlain, D. & Shamberger, C. (2.3.2010). Co-Teaching: An Illustration of the Complexity of Collaboration in Special Education. *Journal of Educational and Psychological Consultation*, 20(1), 9-27. <https://www.tandfonline.com/doi/full/10.1080/10474410903535380>
- Hádková, K. (2016). *Člověk se sluchovým postižením*. Pedagogická fakulta Univerzity Karlovy.
- Hall, B. (2021, 20th May). *3 Keys to More Effective Collaboration in an Inclusive Classroom*. Edutopia. <https://www.edutopia.org/article/3-keys-more-effective-collaboration-inclusive-classroom>
- Immonen, A.L. & Kinnunen, K. (2015, Sep). *Practical Steps Towards Innovative Co-Teaching*, European Conference on Innovation and Entrepreneurship.
- Jurkowski, S., Ulrich, M. & Müller, B. (24.9.2020). Co-teaching as a resource for inclusive classes: teachers' perspective on conditions for successful collaboration. *International Journal of Inclusive Education*. <https://www.tandfonline.com/doi/abs/10.1080/13603116.2020.1821449>
- Kursch, M. (2021). *Skrytý potenciál virtuálního co-teachingu*. Prohuman. <https://www.prohuman.sk/pedagogika/skryty-potencial-virtualniho-co-teachingu>
- Lusk, M., Sayman, D., Zolkoski, S., Carrerro, K. & Lewis-Chiu, C. (2016). Playing well with others: Co-Teaching in higher education. *The Journal of the Effective School Project*, 23, 52-61. [https://www.researchgate.net/publication/309151956\\_Playing\\_well\\_with\\_others\\_Co-Teaching\\_in\\_higher\\_education](https://www.researchgate.net/publication/309151956_Playing_well_with_others_Co-Teaching_in_higher_education)
- Mičkalová, B. (2021). *Tandemová výuka a její využití v hodinách matematiky a výtvarné výchovy*. [Diplomová práce]. Masarykova univerzita.
- Michalík, J., Baslerová, P., Felcmanová, L. & kol. (2015). *Katalog podpůrných opatření – obecná část. Pro žáky s potřebou podpory ve vzdělávání z důvodu zdravotního nebo sociálního znevýhodnění*. Univerzita Palackého v Olomouci.
- Moravcová, M. (2020). *Párová výuka na hodinách matematika na prvním stupni ZŠ*. [Diplomová práce]. Univerzita Palackého v Olomouci.
- Národní pedagogický institut. (n.d.). *Spolupráce s odborníkem z praxe – (nejen) tandemová výuka*. <http://www.nuv.cz/p-kap/tandemova-vyuka-spoluprace-s-odbornikem-z-praxe>
- Piovesan, S. (2016). *Exploring the Dynamics of Co-teaching*. [https://www.ueca.edu.au/archive/pdfest2016-adelaide/Presentations/Session\\_4B.pdf](https://www.ueca.edu.au/archive/pdfest2016-adelaide/Presentations/Session_4B.pdf)
- Spörer, N., Bosse, S. & Henke, T. (August 2020). Is there a dark side of co-teaching? A study on the social participation of primary school students and their interactions with teachers and classmates. *Learning and Instruction*, 71. [https://www.researchgate.net/publication/343888678\\_Is\\_there\\_a\\_dark\\_side\\_of\\_co-teaching\\_A\\_study\\_on\\_the\\_social\\_participation\\_of\\_primary\\_school\\_students\\_and\\_their\\_interactions\\_with\\_teachers\\_and\\_classmates](https://www.researchgate.net/publication/343888678_Is_there_a_dark_side_of_co-teaching_A_study_on_the_social_participation_of_primary_school_students_and_their_interactions_with_teachers_and_classmates)
- Strogilos, V. & King-Sears, M. (2018). Co-teaching is extra help and fun: Perspectives on co-teaching from middle school students and co-teachers. *Journal of Research in Special Education Needs*. (19)1, 92-102. [https://www.researchgate.net/publication/326419152\\_Co-teaching\\_is\\_extra\\_help\\_and\\_fun\\_Perspectives\\_on\\_co-teaching\\_from\\_middle\\_school\\_students\\_and\\_co-teachers](https://www.researchgate.net/publication/326419152_Co-teaching_is_extra_help_and_fun_Perspectives_on_co-teaching_from_middle_school_students_and_co-teachers)
- Svobodová, Z. (2021). *Využití metody co-teaching při vzdělávání žáků se speciálními vzdělávacími potřebami v německé spolkové zemi Baden-Württemberg*. Prohuman. <https://www.prohuman.sk/andragogika/vyuziti-metody-co-teaching-pri-vzdelavani-zaku-se-specialnimi-vzdelavacimi-potrebami>
- Svobodová, Z., Kursch, M., & Veteška, J. (2021). Problems and obstacles of distance learning in the point of view of primary school teachers in the “covid period”. *Proceeding of the 8th International Conference on Educational Technologies 2021*.
- Tandemové učení (2018). *Nabízíme*. <https://tandemoveuceni.cz/category/nabizime/>
- Walsh, J.M. (2012). Co-Teaching as a School System Strategy for Continuous Improvement. *Preventing School Failure: Alternative Education for Children and Youth*, 56(1), 29-36. <https://www.tandfonline.com/doi/full/10.1080/1045988X.2011.555792?scroll=top&needAccess=true>



## Contact details:

Mgr. Wanda Tureckiová  
Department of Special Education  
Faculty of Education  
Charles University  
Magdaléna Rettigová 4,  
110 000 Prague, CZECH REPUBLIC  
Email: turecki.vyzkum@gmail.com

---

# OBSTACLES TO THE INTRODUCTION OF TANDEM TEACHING AT PRIMARY SCHOOL FROM THE PERSPECTIVE OF THE HEADMASTERS

---

Vlastimil Hubert

## Abstract:

In the presented paper, we deal with the issue of tandem teaching at elementary schools from the perspective of school heads. We present a brief insight into the issue from the definition of the term, through its division to the specific possibilities of including tandem teaching in education at elementary school from the management's point of view. We present the results of a survey that examined why primary school headmasters do not include tandem teaching in education at their school? The main reasons are staffing stemming from the overall insufficient number of teachers in the labour market.

## Key words:

education funding, headmaster, tandem teaching, teaching

## 1 INTRODUCTION

Significant and rapid changes of the Czech education system were brought by the Covid 19 pandemic and followed by the period after reopening of schools. Institutions had to reflect the need of introducing distance learning and look for new educational ways. It was necessary to reduce the impact of these measures and thus ensure the continuity of education. (UNESCO, 2020). To maintain the educational effectiveness and finding ways to develop pupils individually, mutual communication and cooperation among teaching staff is desirable.

One of the options for school management to support the individual development of pupils is tandem teaching. This is also confirmed by the CSI within the selected



findings from the secondary analyses of PISA and TALIS. Although tandem teaching is not a completely new phenomenon, it has gained attention especially in recent years. The school head has the decisive word and responsibility for the actual implementation of tandem (couple) teaching. For setting up changes information, suitable and motivated teachers are needed. As well as financial and legislative support.

The following text deals with the theoretical definition of tandem teaching and reveals certain specific aspects of tandem teaching at primary school, especially from the point of view of the school head.

## 2 DEFINITION OF THE TERM TANDEM TEACHING

From a historical point of view, tandem teaching is not a completely new phenomenon, especially for the USA, where it began to take shape more intensively in the seventies of the 20th century. (Morris, 2016; Cook & Friend, 1995). From the point of view of the Czech education system this form of teaching is new and has been developed in the 21st century.

Paired, collaborative or in our country the most common term referred to as tandem teaching is defined as the joint learning of two teachers who cooperate with a group of pupils, where they collaborate on the planning, organization, provision and evaluation of teaching in the same physical space. (Bacharach, Heck & Dank, 2004). Spilková et al. (2015, p. 134) builds the definition of tandem teaching similarly with an accent at the same time. It is *"the work of two or more teachers who plan, lead and evaluate teaching of the same group of learners at the same time"*. Teacher cooperation in all three phases is important. That is, in the planning, implementation and evaluation phase (Spilková et al., 2015; Friend et al., 2010). In this case, we are talking about the so-called 3S model, where teachers should be able to plan the course of teaching together, implement teaching together and evaluate and reflect on teaching together (Hattie, J., 2008).

At present, there are various divisions of tandem teaching (Friend & Cook, 2017; Villa, 2004) for our purposes we will use the division according to Robinson & Schaible (1995). We recognize the following approaches:

1. Traditional team teaching: both teachers participate in the interpretation and presentation of the curriculum.
2. Cooperation during lessons: very often based on mutual discussion of teachers with the possibility of involving pupils in the discussion
3. Complementary or supportive teaching: within the divided roles, one teacher is responsible for the content and course of teaching, the other teacher is helpful and supports the colleague.
4. Parallel teaching: teaching is built on the same theme of the lesson, but takes place in two or more divided groups, and each teacher is responsible for his group
5. Differentiated teaching: teachers work with groups of pupils who have been differentiated in advance according to different signs (knowledge and understanding of the subject matter, etc.)
6. Monitoring teacher: the primary function of the tandem teacher is to monitor in order to ensure an individual pace and adapt the educational activities in the lesson to the individuality of the pupils. Thus, one teacher leads the lesson, and the other monitors the level of understanding and reaction of the pupils.

## 3 POSSIBILITIES OF INTRODUCING TANDEM TEACHING AT PRIMARY SCHOOL FROM THE PERSPECTIVE OF SCHOOL MANAGEMENT

With the adoption of the Strategy for education policy of the Czech Republic until 2030+ (MSMT, 2020) and the change in the financing of regional education from 2020, school heads have significantly opened up the possibilities of introducing tandem teaching into schools. A turning point for the introduction of tandem teaching into the system of education at primary schools was the normative funding set up. Until then, the so-called per pupil and especially the fact, that tandem teaching was not part of the standard of education in public school.

At present, the school management has the following options to provide tandem teaching at the school:

- a) Through the state budget: Government Regulation No. 123/2018 Coll., as amended, sets the maximum number of hours of instruction financed

from the state budget for a primary school, a secondary school and a conservatory established by a region, municipality or union of municipalities. The decree stipulates the so-called PHmax, which is a value that represents the maximum weekly number of hours of teaching in the scope of the framework educational program financed from the state budget. The school head therefore has the opportunity to use the set limit not only for dividing hours, but also for tandem teaching, if it meets the requirements specified in the previous text. Specifically, the Ministry of Education, Youth and Sports refers to tandem teaching as follows: it is *"the presence of two teachers in a lesson who jointly plan the lesson, set its goals and choose methods to achieve them. Subsequently, they implement and evaluate the lesson together."* At the same time, it is necessary that both teachers meet the qualifications under the Act on Educational Staff (Act No. 563/2004 Coll.). In no case may teaching carried out by a teacher and a teacher's assistant be considered tandem teaching.

- b) Involvement in short-term or long-term projects: currently a project that directly encourages the support of tandem teaching at the school is the Operational Programme Research, Development, Education, where tandem teaching is directly supported in Priority Axis 3. Specifically, we are talking about Call No. 02\_20\_080 Template III. The completion of this operational programme is followed by the Operational Programme of Jan Amos Comenius. Under Priority Axis 2, school management can support tandem teaching, as one of the intervention points is the modernization of the objectives and content of education, including forms and methods of learning at all levels of the education system (OPJAK, 2022). In the 2022/2023 school year, applications will be reopened as part of the Kellner Foundation's Helping Schools Succeed support. Selected schools will receive not only financial support, but especially methodological assistance in the field of tandem teaching.
- c) Raising extra-budgetary funds: this is the option that is currently the least available. The school management obtains funds in the form of donations provided to the school for a given purpose or without purpose binding, or through parental or other organizations (e.g. associations)

that conclude donation contracts with donors and subsequently with the school.

The benefit of tandem teaching in the process of education has been verified many times in the past, e.g. (Kokko, Takala & Pihlaja, 2021; Burns & Mintzberg, 2019), at the same time its inclusion in teaching is stated in the main educational strategic documents of the Czech Republic, the finding of the Czech School Inspectorate, which states in its final report that it is appropriate to use it tandem teaching in certain subjects, depending on the priorities of school development (CSI, 2020).

## 4 OBJECTIVES AND RESULTS OF THE SURVEY

The aim of the survey was to find out for a selected group of elementary school headmasters why they do not include tandem teaching in education at their school. The aim was to identify all the circumstances that entered into their decision-making. At the same time, we tried to get information about the most common concerns about the introduction of tandem teaching at their school.

Due to the fact that there is no publicly available database on schools that apply tandem teaching in their educational programs, we used telephone and survey surveys to find out which schools use tandem teaching and which do not. For the purposes of our investigation, it was important to select school leaders that had never undertaken tandem teaching. From all the schools in the Louny district, we selected six schools through a number generator and approached their headmasters with a request for a semi-structured interview. All six selected directors participated in the personal and online interviews. The selected group was represented by three headmasters and three headmistress.

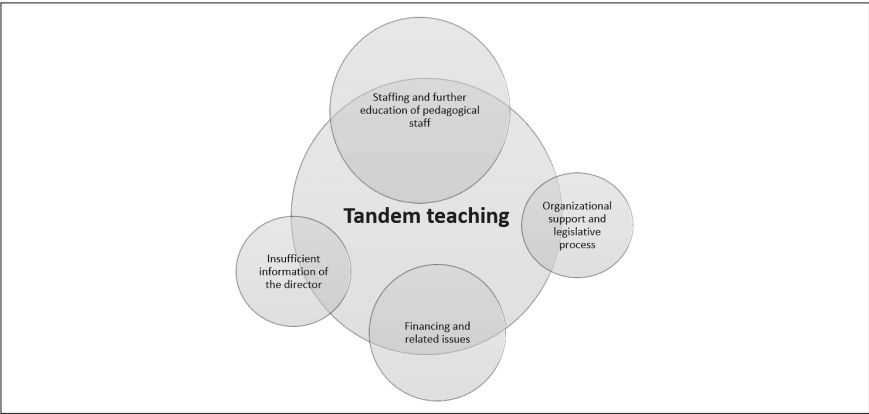
To increase the effectiveness of conducting interviews, we used the general principles outlined by Hendl (2017). The length of the interviews was also planned with regard to the workload of school heads up to 30 minutes of total time. All data has been anonymous and processed in the MAXQDA standard program. After the initial coding, not only because of the saturation of the data, we conducted additional interviews, which took place with a time interval of more than one month. We found that all headmasters have general ideas about tandem teaching. Since none of them

saw the model lesson, was not a participant in the program of further education or educated in this area, their knowledge is basic and rather theoretical. Everyone thought that tandem teaching could include performing a lesson by a teacher with a teaching assistant. However, for the purposes of financing and reporting by the Ministry of Education, Youth and Sports, this is a fundamental mistake.

The directors cited various reasons and concerns for not introducing tandem teaching. We have recorded all the reasons and divided them into content areas. In the ensuing conversation, they were asked to rank them from the most important to the less important. We also give them with examples of answers.

1. Staffing and further education of pedagogical staff  
*"There is no one to teach it anymore, finding another teacher is a superhuman feat." "Teachers can't do it, and where do they learn it?" "There is a lack of further education, especially for the school head, to know what tandem teaching will bring to the school."*
2. Financing and related issues  
*"I don't know where to get the funding. Getting money from templates is not long-term and I prefer to use PHmax to divide the clock."*
3. Organisational support and legislative process  
Directors do not have sufficient awareness and knowledge of reporting. They are not sure how to record these lessons in class books or how to evaluate pupils.
4. Lack of information  
School heads did not receive structured information from the Ministry of Education, Youth and Sports and did not receive more detailed information on the possibilities, advantages and obstacles in the introduction of tandem teaching at schools.

Figure 1: Reasons for not introducing tandem teaching at school



Source: own processing

All surveyed headmasters had enough free hours at their schools within the so-called PHmax to implement tandem teaching and they perceive tandem teaching as beneficial in terms of the quality of education.

## 5 SUMMARY AND DISCUSSION

The survey showed that elementary school headmasters did not always proceed with the introduction of tandem teaching for several reasons. They are most concerned about staffing stemming from the overall under-number of teachers on the labour market. The concerns correspond to the real situation on the labour market, especially in the Ústí nad Labem Region (MEYS, 2019) We have also included professional development of teachers in the area of personnel, where school heads see gaps in the system of education focused on tandem teaching and the lack of model lessons or the absence of inspiring schools.

The interviewees do not have an accurate overview of the possibility of financing tandem tuition from direct educational expenses and the essentials associated with it. From their point of view, funding for tandem teaching from the European Structural Funds is not very effective in relation to the limited length of support for the school. Organizational problems and insufficient awareness of school heads

about the possibilities of introducing tandem teaching in schools were identified as additional reasons. All the headmasters interviewed had the opportunity to introduce tandem teaching under the new regional education funding system, but they are not convinced that the benefits will be large enough to eliminate the risks and concerns of introducing tandem teaching into the school's education.

## 6 CONCLUSION

Changes in education are not based only on curricular documents, but are based on the approach of the school management to the implementation of changes. Research in the last two decades (Walsh, 2012; Dickson & Padilla, 2020; Friend, 2010) unequivocally show the fact that in classrooms where tandem teaching is used, pupils achieve better educational results than in the classical model of education. The quality of education must come first for school heads, and the goal of successful implementation of tandem teaching is to reduce critical factors. As part of the survey, we identified as negative especially the area of financing and staffing.

With regard to the size and determination of the sample under investigation, we cannot call it representative in the population, but the results open the way for further closer examination in order to provide information to create conditions to support the school head. We see online education in the DVPP system as a huge opportunity for the professional development of teaching staff. Removing the above obstacles does not mean that tandem teaching will end in success at school. It is desirable to create conditions and offer such topics and forms in order to support the motivation of workers who will influence the next generation of pupils with their knowledge and skills.

## References

- Bacharach, N., Heck, T., & Dank, M. (2004, February). *Co-teaching in student teaching: A case study. Paper presented at the annual meeting of the Association of Teacher Educators*, Dallas, Texas.
- Burns, V. F., & Mintzberg, S. (2019). *Co-teaching as Teacher Training: Experiential Accounts of Two Doctoral Students*. *College teaching*, 67(2), 94-99. <https://doi.org/10.1080/87567555.2018.1558169>
- Cook, Lynne & Friend, Marilyn. (1995). *Co-Teaching: Guidelines for Creating Effective Practices. Focus on Exceptional Children*. 28. 10.17161/fec.v28i3.6852.
- Dickson, D. & Padilla, M. (2020). *Collaborative Team Teaching (CTT) in Major Subjects Among the Program Offerings in University: Input to 21st Century Teaching-Learning Process*. *PalArch's Journal of Archeology of Egypt/Egyptology* [online]. 17(6)
- Friend, M., Cook, L., Hurley-Chamberlain, D. & Shamberger, C. (2010) *Co-teaching: an illustration of the complexity of collaboration in special education*, *Journal of Educational and Psychological Consultation*, 20 (1), 9–27 Dostupné z: <https://doi.org/10.1080/10474410903535380>
- HATTIE, John. (2008). *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement*. NY: Routledge.
- Hendl, J., & Remr, J. (2017). *Metody výzkumu a evaluace*. portál.
- Kokko, M., Takala, M., & Pihlaja, P. (2021). *Finnish teachers' views on co-teaching*. *British journal of special education*, 48(1), 112-132. <https://doi.org/10.1111/1467-8578.12348>
- Lebeda, T., Marek, D., Zatloukal, T., Andrys, O., Lysek, J., Folwarczný, R., Zymová, K., Soukop, M., Bastl, J. (2021) *Vstřícné prostředí a vztahy ve škole a jejich vliv na průběh a výsledky vzdělávání? Vybraná zjištění ze sekundárních analýz.*, Praha: ČŠI
- Maršíková, M., Jelen, V. (2019). *Hlavní výstupy z Mimořádného šetření ke stavu zajištění výuky učitelů v MŠ, ZŠ, SŠ a VOŠ. MŠMT*
- Morris, P. K. (2016). *Team teaching of creative advertising and public relations courses*. *Journal of Advertising Education*, 20(1), 44-53,6. Dostupné z: <https://www-proquest-com.ezproxy.muni.cz/docview/1812271381?accountid=16531>

*Nařízení vlády o stanovení maximálního počtu hodin výuky financovaného ze státního rozpočtu pro základní školu, střední školu a konzervatoř zřizovanou krajem, obcí nebo svazkem obcí.* (2018), MŠMT

Robinson, B., Schaible, R. M. (1995). *Collaborative teaching: Reaping the benefits.* *College Teaching*, 43(2), s. 57–60.

Spilková, V., Tomková, A., Mazáčová, N., & Poche Kargerová, J. (2015). *Klinická škola a její role ve vzdělávání učitelů.* Retida spol. s r.o.

UNESCO. (2020). Education: From disruption to recovery. Retrieved from <https://en.unesco.org/covid19/educationresponse>.

Veteška, J. & Tureckiová M. (2020). *Kompetence ve vzdělávání a strategie profesního rozvoje.* Praha: Česká andragogická společnost

Walsh, J. M. (2012). *Co-Teaching as a School System Strategy for Continuous Improvement. Preventing school failure*, 56(1), 29-36. <https://doi.org/10.1080/1045988X.2011.555792>

## Acknowledgment

This paper was supported by COOPERATIO (programme of Charles University, Faculty of Education, 2022-2026).

## Contact details:

PhDr. et. Mgr. Vlastimil Hubert, MBA  
Department of Andragogy and Management education  
Faculty of Education, Charles University  
Myslíkova 7  
116 39 Prague 1, CZECH REPUBLIC  
E-mail: [vlastimil.hubert@pedf.cuni.cz](mailto:vlastimil.hubert@pedf.cuni.cz)

Jaroslav Kříž & Zuzana Svobodová (eds.)

## **Adult Education 2021 – In Diverse Learning Environments:**

Proceedings of the 11<sup>th</sup> International Adult Education Conference  
(IAEC 2021), 14–15 December 2021, Prague, Czech Republic

### **Publisher:**

© Czech Andragogy Society

Prague, 2022

[www.candrs.cz](http://www.candrs.cz)

ISBN 978-80-908330-0-5 (Print)

ISBN 978-80-908330-2-9 (pdf)

ISSN 2571-3841 (Print)

ISSN 2571-385X (Online)





# **ADULT EDUCATION**

2021



**FACULTY OF EDUCATION**  
Department of Andragogy  
and Educational Management  
**Charles University**

