

EVALUATION OF TEACHING PRACTICE BY STUDENTS OF TEACHER EDUCATION AT PAVOL JOZEF ŠAFÁRIK UNIVERSITY IN KOŠICE

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Abstract: The teaching practice of teacher education students is a means of their professional growth and a space for forming a comprehensive understanding of the process of institutionalized education and pupil training. Well-managed and implemented practice reflects the quality of future teacher preparation. The aim of this study is to analyze students' opinions on teaching practice in terms of key aspects that underpin its effectiveness. We used a self-designed questionnaire consisting of four sections of scaled items (respondents expressed their views on practice organization, preparedness to handle it, professional competencies, and practice conditions). The study involved 111 students of teacher education at Pavol Jozef Šafárik University in Košice (the criterion for inclusion in the study was the completion of all types of teaching practices). Based on paired comparisons of scores for the items in the first section, we identified a statistically significant difference in student satisfaction with the organization of teaching practices by the Department of Pedagogy, significant differences in satisfaction with the organization of practices by teachers, psychologists, and subject didacticists, statistically significant differences in satisfaction with the scope of observations in teaching practices, and a statistically significant difference in satisfaction with the extent of independent outputs in teaching practices. Based on paired comparisons of scores in the second section, we identified a statistically significant difference in students' preparedness for observation-pedagogical-psychological practice in selected subjects, statistically significant differences in their preparedness for interim practice in selected subjects, a statistically significant difference in their preparedness for continuous practice II in selected subjects, and statistically significant differences in the necessity of teaching practices for students in practical professional preparation. Based on paired comparisons of scores in the third section, we identified a statistically significant difference in the level of professional competencies of students in the area of professional development. Based on paired comparisons of scores in the fourth section, we identified statistically significant differences in students' assessment of the conditions of teaching practice at the training school. The research findings suggest that teacher education students generally evaluate the structure, process, and benefits of teaching practice positively. However, the results indicated that changes should be made towards greater uniformity in practice organization (MPPc, MPPd), a reduction in the number of observations, strengthening of independent outputs (MPPb, MPPc, and MPPd), thorough preparation for practice in psychology (MPPa, MPPd) and subject didactics (MPPb), clearer development of students' diagnostic competence, and an expansion of opportunities to engage in additional activities at the training school.

Keywords: student, teacher, teaching practice, university.

1 Introduction

Pedagogical practice is one of the fundamental constitutive elements involved in preparing future teachers for educational activities, shaping their approach to teaching and perspective on expertise. The practice of teaching students in real school conditions is not merely a straightforward application of acquired knowledge in a selected educational setting. It serves as a platform for testing didactic theories, developing resulting teaching strategies, and reassessing the effectiveness of the applied teacher education model.

The conclusion of Rovňanová's (2013) study is that a teacher's functional literacy depends not only on the thoughtful organization of undergraduate and postgraduate training. Regardless of how we try to prepare teaching graduates, the final transformation into an expert teacher lies in the hands of real school practice (including their own activity). The results of the study by Ozdemir and Yildirim (2012) indicate that teaching practice courses support the professional development of teaching students, especially in gaining pedagogical experience. They have the opportunity to practice the skills acquired during their bachelor's studies in a school environment and to get to

gain deeper insight into the teaching profession. Research by Černá et al. (2017) demonstrated that the clinical year impacted the professional progress of teaching students in all monitored variables (focus on students, growth in flexibility, long-term planning skills, and anticipation). Danek (2019) affirms that pedagogical practice is associated not only with the motivation of teaching students to study but is also crucial for their retention in the profession.

Kontířová (2010) mentions the following basic functions of pedagogical practice:

- Integrative – Pedagogical practice serves to overcome the isolation of knowledge structures in the disciplines of higher education preparation and to support a more comprehensive understanding of educational phenomena and processes.
- Orientational – Pedagogical practice familiarizes students with the specific school environment and its organization (types of schools, educational programs, various classes).
- Educational – Pedagogical practice complements and enriches the theoretical preparation of students and creates conditions for its concrete and creative use in the educational process.
- Self-reflective – Pedagogical practice forms the foundation for the development of pedagogical thinking in teaching students, as they need to be able to justify their teaching methods.
- Feedback – Pedagogical practice is a tool for aligning theoretical instruction with the latest scientific knowledge and the needs of the school.
- Stimulative – Pedagogical practice contributes to shaping the student's attitude toward the teaching profession itself.
- Socialization – Pedagogical practice shows teaching students how to strengthen appropriate social bonds among students and the teaching staff.

The teaching practice of students in elementary and secondary schools usually has a gradational character. At faculties of education, a 4-level model of pedagogical practice is typically used. Novocký et al. (2021), following Kosová, Tomengová et al. (2015), describe the following types of practices:

- Observation-Pedagogical-Psychological Practice (MPPa) – Its primary purpose is to familiarize students with the real school environment, reflect on and understand the characteristics of elementary and secondary schools, confront the theoretical aspects of university preparation with educational reality, and prepare for assistant activities and their own teaching outputs. The key activity of this practice is pedagogical observation focused on the activities and behavior of students and teachers in the context of educational and psychological phenomena.
- Interim Practice (MPPb) – Its main purpose is to observe the school's socio-cultural environment, the internal and external conditions of teaching and learning in the specialized subjects, observe interactions between teaching participants, and further confront the theoretical and practical aspects of university preparation with educational reality. The key activity of this practice is pedagogical observation focused on psychodidactic phenomena in the subjects of specialization (also mastering one independent output).
- Continuous Practice I (MPPc) – Its primary purpose is to develop the knowledge gained through observation during previous pedagogical practices and to form students' professional skills through direct activities in lessons. The key activity of this practice is independent teaching outputs in specialized subjects (application of didactic tools, implementation of their own educational project designed for teaching a given topic).

- Continuous Practice II (MPPd) – Its main purpose is to verify theoretical knowledge and deepen didactic competencies in the educational environment. The key activity of this practice is independent teaching outputs in specialized subjects (the student conducts the teaching process continuously over a specified period).

Uçar (2012) states that the learning process plays a crucial role in pedagogical practice, providing teacher candidates with a space for professional development. The key elements determining the quality of the practice are the mentor, cooperating teacher, teaching student, and the practice school itself. The mentioned author conducted empirical research, choosing to conduct interviews with multiple groups of participants (school administrators, mentors, and teaching students). The analyzed data from the research participants point to potential reasons why pedagogical practice does not achieve its set goals. These include issues related to theoretical knowledge, the timing and duration of practice, its organization, as well as communication and regulations. One of the cardinal recommendations arising from the research by Tomengová et al. (2017) for undergraduate teacher education is the adjustment of the balance between theoretical and practical training, focusing on content-oriented and process-oriented knowledge by increasing the share of practice for future teachers.

Our first research objective was to determine how satisfied teacher training students are with the management of teaching practices and the number of observations or independent outputs concerning the described practices. Additionally, we were interested in the level of satisfaction they attribute to achieving the objectives of each practice.

A sequentially structured practice, where a teaching student progresses from mastering elementary pedagogical-didactic activities to managing a teaching unit, has its justification, which arises from fulfilling the partial objectives of pedagogical practice. Siroťová (2015) describes these in more detail, operationalizing the main purpose of teaching students' practice:

- Orienting oneself in the basic pedagogical documentation of the school and classroom.
- Using pedagogical agendas in the teaching process during pedagogical practice.
- Getting to know the school environment (conditions for teaching in classrooms).
- Understanding the students in the classroom (knowing how to work with them based on their individual characteristics).
- Planning lessons (formulating and setting educational goals, selecting methods, creating teaching aids, etc.).
- Independently and creatively implementing the educational process.
- Developing one's own teaching concept (or teaching style).

In the Slovak context, Rovňanová and Nemcová (2017) evaluated the connection between the theoretical and practical preparation of teaching students. The results of their research specifically point to significant dissatisfaction among future teachers regarding the development of specific professional activities during their studies (negative assessments predominated in 25 of these activities). Petrová and Duchovičová (2013), in a reflection-oriented study focused on university teacher training in the context of transformational processes, summarize, based on research conducted among teaching graduates at two universities in Slovakia, that future teachers are dissatisfied with the highly academic nature of their preparation, which is disconnected from educational reality, their preparedness to work with students with special educational needs (health-disadvantaged, problematic), and the lack of teaching skills (creating thematic plans, innovative teaching aids, classroom work planning).

Kyriacou and Stephens (1999) identified nine main areas of concern for teaching students during their practice. Trainees worry about not being seen as real teachers, managing disruptive

behavior in the classroom, taking on the role of disciplinarian, whether they will teach adequately, proper planning, teaching sensitive topics, handling a heavy workload, the lack of teaching experience, and being the subject of evaluation themselves. On the other hand, they classify the categories of students' successes supported by practice as taking on responsibility and developing self-confidence.

Considering these facts, our second research objective was to investigate how teaching students are prepared to handle practice from the perspective of key subjects that are part of their university education. In this context, we were interested in how they evaluate their performance during practice and how they perceive its necessity in their practical professional training.

Orosová and Boberová (2016) propose viewing the teaching practice of students as a form of experiential learning through which trainees develop their professional and personal dispositions. Toom et al. (2015), in their study of patterns of reflective episodes among teaching students, demonstrated that students are capable of applying reflection beyond practical problems in teaching and can formulate various professional questions arising from discrepancies in practice. Thoughtful integration of theory and practice in teacher training can contribute to the development of 21st-century competencies, as evidenced by the conclusions of the study by Niu et al. (2021).

Given the current discourse on the professionalization of the teacher's educational work, it is appropriate to discuss professional competencies. These concern all teachers, regardless of career level and years of experience (including teaching students as novice teachers). The structure and content of the Professional Standard for Lower and Upper Secondary Education Teachers (2017) indicate that a teacher should effectively demonstrate activities related to diagnostic, professional-didactic, and reflective competencies. First, they should recognize and differentiate the biological, psychological, social, and material circumstances of education (the abilities of students and their own capabilities). Second, they should master the content and didactics of their subject, plan, implement, and evaluate the course and results of education (eliminating unintended elements from teaching and avoiding unwarranted spontaneity). Third, they should strive for self-development (which requires identifying with the professional role and conducting professional reflection, serving as a basis for removing stereotypes in teaching and introducing innovations).

Gabrhelová et al. (2020), in the conclusion of their study, propose suggestions for improving teaching practice. Alongside minimizing schedule changes during its course, it is crucial to build awareness of practice schools as cooperating organizations with the academic environment and actively work with practice teachers through informational meetings, seminars, and workshops. Practice teachers can facilitate the learning process for teaching students through practical experiences and provide them with suitable models for working with students (Baeten & Simons, 2016; Jaspers et al., 2022). As Northfield and Gunstone (1997) point out, teacher educators (i.e., faculty teachers covering the common core and subject didactics) should maintain a close connection with school practice. McIntyre and Hagger (1992) emphasize that when developing teaching practices, the value of collegiality should not be underestimated.

These facts served as the basis for defining two additional research objectives. First, we investigated the level of professional competencies of teaching students, and then we examined how they would evaluate the conditions of pedagogical practice at training schools and the approach of the practice teacher.

2 Methodology

To map students' opinions on the course and implementation of pedagogical practice, we used a self-designed questionnaire consisting of four sections. In the first section, respondents answered items related to their satisfaction with the organization

of the teaching practice, the scope of observations, independent outputs during the practice, and the fulfillment of its purpose and objectives (5 – very satisfied, 4 – satisfied, 3 – neutral, 2 – dissatisfied, 1 – very dissatisfied; MPPa – Observation-Pedagogical-Psychological Practice, MPPb – Interim Teaching Practice, MPPc – Continuous Teaching Practice I, MPPd – Continuous Teaching Practice II). In the second section, respondents answered items concerning their preparedness for different types of pedagogical practices from a professional perspective in relevant subjects (5 – excellent, 4 – very good, 3 – good, 2 – sufficient, 1 – insufficient). In the last two items of this section, they were to express their satisfaction with themselves and their performance during the practices (5 – very satisfied, 4 – satisfied, 3 – neutral, 2 – dissatisfied, 1 – very dissatisfied, N – I have not yet completed it; MPPb – Interim Teaching Practice, MPPc – Continuous Teaching Practice I, MPPd – Continuous Teaching Practice II) and to what extent these practices are necessary in their practical professional preparation (5 – very necessary, 4 – necessary, 3 – neutral, 2 – unnecessary, 1 – completely unnecessary; MPPa – Observation-Pedagogical-Psychological Practice, MPPb – Interim Teaching Practice, MPPc – Continuous Teaching Practice I, MPPd – Continuous Teaching Practice II). In the third section, respondents answered items regarding the level of their professional competencies as beginning teachers (5 – excellent, 4 – very good, 3 – good, 2 – sufficient, 1 – insufficient). In the last section, respondents answered items concerning the assessment of the conditions of the teaching practice at the training school and the approach of the mentor teacher (5 – excellent, 4 – very good, 3 – good, 2 – sufficient, 1 – insufficient). The content evaluation of the tool was carried out by didactics experts.

2.1 Research sample

The research sample was assembled using an available selection method. Students of teacher training at UPJS were invited to fill out an online questionnaire after completing the Continuous Teaching Practice II (MPPd). A total of 121 respondents participated in the research; however, after removing those who had not completed this type of practice (e.g., had only completed the first two types of practice) and those who responded to the questionnaire items by choosing extreme alternatives (1 or 5), we worked with a research sample of 111 respondents. Data collection took place between 2021 and 2023.

2.2 Data Analysis

To evaluate statistically significant differences between variables, we used non-parametric tests (Friedman test, Dunn-Bonferroni post hoc test, and Wilcoxon test). The level of significance was 0.05. The Likert scale essentially has the characteristics of an ordinal variable (a respondent's answer to a single item in the questionnaire, formatted, for example, with 5 levels). If such items do not cover a dimension of the tool where a summary score for respondents would be calculated, we should refrain from claiming that it is an interval variable (see Kubiak, 2016 for further details). Descriptive statistics used included mean rank, arithmetic mean (AM), standard deviation (SD), median (Me), mode (Mod), minimum (Min), and maximum (Max) measurement values. Nevertheless, when interpreting the results of the research, we used the arithmetic mean (to compare the higher or lower scores achieved by the respondents, but without determining the difference between them – how much better they were). We also consider the value of the mean rank. Data processing was carried out using SPSS 27.0.1.0.

2.3 Research Questions

Based on the theory and research objectives, we formulated the following research questions:

RQ1: Is there a statistically significant difference in student satisfaction with the organization of teaching practices provided by the Department of Pedagogy concerning pairwise comparisons?

RQ2: Is there a statistically significant difference in student satisfaction with the organization of teaching practices by teachers, psychologists, and subject didactics experts concerning pairwise comparisons?

RQ3: Is there a statistically significant difference in student satisfaction with the scope of observations in teaching practices concerning pairwise comparisons?

RQ4: Is there a statistically significant difference in student satisfaction with the scope of independent outputs in teaching practices concerning pairwise comparisons?

RQ5: Is there a statistically significant difference in student satisfaction with the fulfilment of the mission and objectives of teaching practices concerning pairwise comparisons?

RQ6: Is there a statistically significant difference in students' preparedness for the Observation-Pedagogical-Psychological Practice in terms of selected subjects?

RQ7: Is there a statistically significant difference in students' preparedness for the Interim Teaching Practice in terms of selected subjects concerning pairwise comparisons?

RQ8: Is there a statistically significant difference in students' preparedness for Continuous Teaching Practice I in terms of selected subjects concerning pairwise comparisons?

RQ9: Is there a statistically significant difference in students' preparedness for Continuous Teaching Practice II in terms of selected subjects concerning pairwise comparisons?

RQ10: Is there a statistically significant difference in student satisfaction with their performance as a teacher during previous teaching practices concerning pairwise comparisons?

RQ11: Is there a statistically significant difference in the perceived necessity of teaching practices for students in the practical professional preparation of future teachers concerning pairwise comparisons?

RQ12: Is there a statistically significant difference in the level of students' professional competencies in the area of "student" concerning pairwise comparisons?

RQ13: Is there a statistically significant difference in the level of students' professional competencies in the area of "educational process" concerning pairwise comparisons?

RQ14: Is there a statistically significant difference in the level of students' professional competencies in the area of "professional development"?

RQ15: Is there a statistically significant difference in students' assessment of the conditions of teaching practice at the training school concerning pairwise comparisons?

RQ16: Is there a statistically significant difference in the mentor teacher's approach to the student during teaching practice concerning pairwise comparisons?

3 Research results

Table 1 shows that there is a statistically significant difference (Friedman test = 33.469; $p = 0.000$) in student satisfaction with the organization of teaching practices by the Department of Pedagogy (communication, problem-solving, supporting materials). Based on pairwise comparisons, a statistically significant difference was found between MPPd and MPPa (Dunn-Bonferroni post hoc test = 3.015; $p = 0.015$). Respondents scored higher for MPPa (AM = 4.47) and lower for MPPd (AM = 4.08).

Table 2 shows that there is a statistically significant difference (Friedman test = 45.888; $p = 0.000$) in student satisfaction with the organization of teaching practices by teachers, psychologists, and subject didactics experts (supporting material for observations, supporting material for the preparation of outputs). Based on pairwise comparisons, a statistically significant difference was found between MPPd and MPPb (Dunn-Bonferroni post hoc test = 2.885; $p = 0.023$) and between MPPd and MPPa (Dunn-Bonferroni post hoc test = 3.457; $p = 0.003$). In the first case, respondents scored higher for MPPb (AM = 4.24) and lower for MPPd (AM = 3.84). In the second case, they scored higher for MPPa (AM = 4.29) and lower for MPPd (AM = 3.84).

Table 3 shows that there is a statistically significant difference (Friedman test = 55.994; $p = 0.000$) in student satisfaction with

the scope (number) of observations in teaching practices. Based on pairwise comparisons, a statistically significant difference was found between MPPd and MPPc (Dunn-Bonferroni post hoc test = 3.171; $p = 0.009$), between MPPd and MPPb (Dunn-Bonferroni post hoc test = 3.353; $p = 0.005$), and between MPPd and MPPa (Dunn-Bonferroni post hoc test = 5.121; $p = 0.000$). In the first case, respondents scored higher for MPPc (AM = 3.69) and lower for MPPd (AM = 3.19). In the second case, they scored higher for MPPb (AM = 3.74) and lower for MPPd (AM = 3.19). In the third case, they scored higher for MPPa (AM = 4.04) and lower for MPPd (AM = 3.19).

Table 4 shows that there is a statistically significant difference (Friedman test = 20.016; $p = 0.000$) in student satisfaction with the scope of independent outputs in teaching practices. Based on pairwise comparisons, a statistically significant difference was found between MPPd and MPPc (Dunn-Bonferroni post hoc test = 3.356; $p = 0.002$). Respondents scored higher for MPPc (AM = 3.58) and lower for MPPd (AM = 3.09).

The data presented in Table 5 indicate that there is no statistically significant difference (Friedman test = 5.726; $p = 0.126$) in student satisfaction with the fulfillment of the mission and objectives of teaching practices. Respondents scored similarly across all items.

Table 6 shows that there is a statistically significant difference (Wilcoxon test = -2.476; $p = 0.013$) in students' preparedness for the observation-pedagogical-psychological practice from selected subjects. Respondents scored higher for pedagogy (AM = 3.77) and lower for psychology (AM = 3.65).

Table 7 indicates that there is a statistically significant difference (Friedman test = 55.389; $p = 0.000$) in students' preparedness for the interim teaching practice from the perspective of selected subjects. Based on pairwise comparisons, a statistically significant difference was found between subject didactics of the 1st specialization subject and specialized subjects of the 1st specialization subject (Dunn-Bonferroni post hoc test = -3.139; $p = 0.025$), between subject didactics of the 1st specialization subject and specialized subjects of the 2nd specialization subject (Dunn-Bonferroni post hoc test = -3.516; $p = 0.007$), and between subject didactics of the 2nd specialization subject and specialized subjects of the 2nd specialization subject (Dunn-Bonferroni post hoc test = -3.229; $p = 0.019$). In the first case, respondents scored higher for specialized subjects of the 1st specialization subject (AM = 4.02) and lower for subject didactics of the 1st specialization subject (AM = 3.60). In the second case, they scored higher for specialized subjects of the 2nd specialization subject (AM = 4.06) and lower for subject didactics of the 1st specialization subject (AM = 3.60). In the third case, they scored higher for specialized subjects of the 2nd specialization subject (AM = 4.06) and lower for subject didactics of the 2nd specialization subject (AM = 3.61).

Although Table 8 indicates that there is a statistically significant difference (Friedman test = 27.537; $p = 0.000$) in students' preparedness for Continuous Teaching Practice I from the perspective of selected subjects, the pairwise comparisons using the Bonferroni procedure did not reveal a statistically significant difference between the subjects. Respondents scored similarly across all subjects.

Table 9 indicates that there is a statistically significant difference (Friedman test = 27.935; $p = 0.000$) in students' preparedness for Continuous Teaching Practice II from the perspective of selected subjects. Based on pairwise comparisons, a statistically significant difference was found between psychology and specialized subjects of the 2nd specialization subject (Dunn-Bonferroni post hoc test = -2.942; $p = 0.049$). Respondents scored higher for specialized subjects of the 2nd specialization subject (AM = 4.12) and lower for psychology (AM = 3.73).

Although Table 10 indicates that there is a statistically significant difference (Friedman test = 11.575; $p = 0.003$) in student satisfaction with their performance as a teacher during

previous teaching practices, the pairwise comparisons using the Bonferroni procedure did not reveal a statistically significant difference between the practices. Respondents scored similarly across all practices.

Table 11 indicates that there is a statistically significant difference (Friedman test = 100.813; $p = 0.000$) in the perceived necessity of teaching practices for students in the practical professional preparation of future teachers. Based on pairwise comparisons, a statistically significant difference was found between MPPa and MPPd (Dunn-Bonferroni post hoc test = -4.939; $p = 0.000$), between MPPa and MPPc (Dunn-Bonferroni post hoc test = -5.563; $p = 0.000$), between MPPb and MPPd (Dunn-Bonferroni post hoc test = -4.211; $p = 0.000$), and between MPPb and MPPc (Dunn-Bonferroni post hoc test = -4.835; $p = 0.000$). In the first case, respondents scored higher for MPPd (AM = 4.69) and lower for MPPa (AM = 4.07). In the second case, they scored higher for MPPc (AM = 4.77) and lower for MPPa (AM = 4.07). In the third case, they scored higher for MPPd (AM = 4.69) and lower for MPPb (AM = 4.19). In the fourth case, they scored higher for MPPc (AM = 4.77) and lower for MPPb (AM = 4.19).

The data presented in Table 12 indicate that there is no statistically significant difference (Friedman test = 3.754; $p = 0.153$) in the level of students' professional competencies in the area of "student". Respondents scored similarly in their assessment of the level of their professional competencies within this area.

Although Table 13 indicates that there is a statistically significant difference (Friedman test = 9.867; $p = 0.020$) in the level of students' professional competencies in the area of "educational process", the pairwise comparisons using the Bonferroni procedure did not reveal a statistically significant difference between the professional competencies. Respondents scored similarly across all competencies.

Table 14 indicates that there is a statistically significant difference (Wilcoxon test = -2.884; $p = 0.004$) in the level of students' professional competencies in the area of "professional development". Respondents scored higher for the competency of identification with the professional role and the school (AM = 3.75) and lower for the competency of planning and implementing their professional growth and self-development (AM = 3.56).

Table 15 indicates that there is a statistically significant difference (Friedman test = 50.298; $p = 0.000$) in the assessment of teaching practice conditions by students at the training school. Based on pairwise comparisons, a statistically significant difference was found between opportunities to participate in other school activities and the equipment of classrooms and laboratories (Dunn-Bonferroni post hoc test = 3.429; $p = 0.009$), between opportunities to participate in other school activities and the timetable (Dunn-Bonferroni post hoc test = 3.919; $p = 0.001$), between opportunities to participate in other school activities and material-didactic resources for teaching curriculum topics (Dunn-Bonferroni post hoc test = 3.939; $p = 0.001$), between opportunities to participate in other school activities and the composition of the class (Dunn-Bonferroni post hoc test = 3.978; $p = 0.001$), and between opportunities to participate in other school activities and the space for the trainee (Dunn-Bonferroni post hoc test = 4.605; $p = 0.000$). Respondents scored the lowest for opportunities to participate in other school activities (AM = 3.42).

Although Table 16 indicates that there is a statistically significant difference (Friedman test = 33.606; $p = 0.000$) in the mentor teacher's approach during teaching practice as assessed by students, the pairwise comparisons using the Bonferroni procedure did not reveal a statistically significant difference between the components of this approach. Respondents scored similarly across all components.

Table 1: Satisfaction with the Organization of Teaching Practices by the Department of Pedagogy (Communication, Problem Solving, Supporting Materials)

Type of Practice	N	Mean rank	AM	SD	Me	Mod	Min	Max	Friedman Test	p-value
MPPa	111	2.70	4.47	0.60	5.00	5.00	3.00	5.00	33.469	0.000
MPPb	111	2.63	4.40	0.64	4.00	5.00	3.00	5.00		
MPPc	111	2.49	4.31	0.84	5.00	5.00	2.00	5.00		
MPPd	111	2.18	4.08	0.90	4.00	5.00	2.00	5.00		
Pairwise Comparisons									Dunn-Bonferroni Post Hoc Test	Adjusted Significance
MPPd – MPPc									1.794	0.437
MPPd – MPPb									2.573	0.060
MPPd – MPPa									3.015	0.015
MPPc – MPPb									0.780	1.000
MPPc – MPPa									1.222	1.000
MPPb – MPPa									0.442	1.000

Table 2: Satisfaction with the Organization of Teaching Practices by Teachers, Psychologists, and Subject Didactics Experts (Supporting Material for Observations, Supporting Material for Preparation of Outputs)

Type of Practice	N	Mean rank	AM	SD	Me	Mod	Min	Max	Friedman Test	p-value
MPPa	111	2.76	4.29	0.78	4.00	4.00	1.00	5.00	45.888	0.000
MPPb	111	2.66	4.24	0.74	4.00	4.00	2.00	5.00		
MPPc	111	2.41	4.05	0.91	4.00	4.00	2.00	5.00		
MPPd	111	2.16	3.84	0.96	4.00	4.00	2.00	5.00		
Pairwise Comparisons									Dunn-Bonferroni Post Hoc Test	Adjusted Significance
MPPd – MPPc									1.456	0.873
MPPd – MPPb									2.885	0.023
MPPd – MPPa									3.457	0.003
MPPc – MPPb									1.430	0.917
MPPc – MPPa									2.002	0.272
MPPb – MPPa									0.572	1.000

Table 3: Satisfaction with the Scope (Number) of Observations in Teaching Practices

Type of Practice	N	Mean rank	AM	SD	Me	Mod	Min	Max	Friedman Test	p-value
MPPa	111	2.88	4.04	1.02	4.00	4.00	1.00	5.00	55.994	0.000
MPPb	111	2.58	3.74	1.09	4.00	4.00	1.00	5.00		
MPPc	111	2.55	3.69	1.04	4.00	4.00	1.00	5.00		
MPPd	111	2.00	3.19	1.17	3.00	4.00	1.00	5.00		
Pairwise Comparisons									Dunn-Bonferroni Post Hoc Test	Adjusted Significance
MPPd – MPPc									3.171	0.009
MPPd – MPPb									3.353	0.005
MPPd – MPPa									5.121	0.000
MPPc – MPPb									0.182	1.000
MPPc – MPPa									1.950	0.307
MPPb – MPPa									1.768	0.463

Table 4: Satisfaction with the Scope (Number) of Independent Outputs in Teaching Practices

Type of Practice	N	Mean rank	AM	SD	Me	Mod	Min	Max	Friedman Test	p-value
MPPb	111	1.98	3.25	1.33	4.00	4.00	1.00	5.00	20.016	0.000
MPPc	111	2.23	3.58	1.05	4.00	4.00	1.00	5.00		
MPPd	111	1.78	3.09	1.18	3.00	4.00	1.00	5.00		
Pairwise Comparisons									Dunn-Bonferroni Post Hoc Test	Adjusted Significance
MPPd – MPPb									1.477	0.419
MPPd – MPPc									3.356	0.002
MPPb – MPPc									-1.879	0.181

Table 5: Satisfaction with the Fulfillment of the Mission and Objectives of Teaching Practices

Type of Practice	N	Mean rank	AM	SD	Me	Mod	Min	Max	Friedman Test	p-value
MPPa	111	2.54	4.17	0.72	4.00	4.00	2.00	5.00	5.726	0.126
MPPb	111	2.44	4.05	0.86	4.00	4.00	1.00	5.00		
MPPc	111	2.63	4.23	0.83	4.00	5.00	2.00	5.00		
MPPd	111	2.40	4.06	0.87	4.00	5.00	2.00	5.00		

Table 6: Preparedness for Observation-Pedagogical-Psychological Practice from the Perspective of Selected Subjects

Subject	N	AM	SD	Me	Mod	Min	Max	Wilcoxon Test (Z)	p-value
pedagogy	111	3.77	1.00	4.00	4.00	1.00	5.00	-2.476	0.013
psychology	111	3.65	1.04	4.00	4.00	1.00	5.00		

Table 7: Preparedness for Interim Teaching Practice from the Perspective of Selected Subjects

Subject	N	Mean rank	AM	SD	Me	Mod	Min	Max	Friedman Test	p-value
pedagogy	111	3.50	3.78	0.91	4.00	4.00	1.00	5.00	55.389	0.000
psychology	111	3.27	3.68	0.99	4.00	4.00	1.00	5.00		
subject didactics (1. AP)	111	3.12	3.60	0.99	4.00	4.00	1.00	5.00		
subject didactics (2. AP)	111	3.19	3.61	1.05	4.00	4.00	1.00	5.00		
specialized subjects (1. AP)	111	3.91	4.02	0.92	4.00	4.00	1.00	5.00		
specialized subjects (2. AP)	111	4.00	4.06	0.91	4.00	4.00	1.00	5.00		
Pairwise Comparisons									Dunn-Bonferroni Post Hoc Test	Adjusted Significance
subject didactics of the 1st specialization subject – subject didactics of the 2nd specialization subject									-0.287	1.000
subject didactics of the 1st specialization subject – psychology									0.610	1.000
subject didactics of the 1st specialization subject – pedagogy									1.489	1.000
subject didactics of the 1st specialization subject – specialized subjects of the 1st specialization subject									-3.139	0.025
subject didactics of the 1st specialization subject – specialized subjects of the 2nd specialization subject									-3.516	0.007
subject didactics of the 2nd specialization subject – psychology									0.323	1.000
subject didactics of the 2nd specialization subject – pedagogy									1.202	1.000
subject didactics of the 2nd specialization subject – specialized subjects of the 1st specialization subject									-2.852	0.065
subject didactics of the 2nd specialization subject – specialized subjects of the 2nd specialization subject									-3.229	0.019
psychology – pedagogy									0.879	1.000
psychology – specialized subjects of the 1st specialization subject									-2.529	0.171
psychology – specialized subjects of the 2nd specialization subject									-2.906	0.055
pedagogy – specialized subjects of the 1st specialization subject									-1.650	1.000
pedagogy – specialized subjects of the 2nd specialization subject									-2.027	0.640
specialized subjects of the 1st specialization subject – specialized subjects of the 2nd specialization subject									-0.377	1.000

Table 8: Preparedness for Continuous Teaching Practice I from the Perspective of Selected Subjects

Subject	N	Mean rank	AM	SD	Me	Mod	Min	Max	Friedman Test	p-value
pedagogy	111	3.43	3.77	0.95	4.00	4.00	1.00	5.00	27.537	0.000
psychology	111	3.22	3.68	1.00	4.00	4.00	1.00	5.00		
subject didactics (1. AP)	111	3.29	3.73	0.93	4.00	4.00	1.00	5.00		
subject didactics (2. AP)	111	3.44	3.76	1.00	4.00	4.00	1.00	5.00		
specialized subjects (1. AP)	111	3.76	3.97	0.93	4.00	5.00	2.00	5.00		
specialized subjects (2. AP)	111	3.87	4.02	0.93	4.00	4.00	1.00	5.00		
Pairwise Comparisons									Dunn-Bonferroni Post Hoc Test	Adjusted Significance
psychology – subject didactics of the 1st specialization subject									-0.269	1.000
psychology – pedagogy									0.825	1.000
psychology – subject didactics of the 2nd specialization subject									-0.861	1.000
psychology – specialized subjects of the 1st specialization subject									-2.135	0.492

psychology – specialized subjects of the 2nd specialization subject	-2.583	0.147
subject didactics of the 1st specialization subject – pedagogy	0.556	1.000
subject didactics of the 1st specialization subject – subject didactics of the 2nd specialization subject	-0.592	1.000
subject didactics of the 1st specialization subject – specialized subjects of the 1st specialization subject	-1.865	0.932
subject didactics of the 1st specialization subject – specialized subjects of the 2nd specialization subject	-2.314	0.310
pedagogy – subject didactics of the 2nd specialization subject	-0.036	1.000
pedagogy – specialized subjects of the 1st specialization subject	-1.309	1.000
pedagogy – specialized subjects of the 2nd specialization subject	-1.758	1.000
subject didactics of the 2nd specialization subject – specialized subjects of the 1st specialization subject	-1.274	1.000
subject didactics of the 2nd specialization subject – specialized subjects of the 2nd specialization subject	-1.722	1.000
specialized subjects of the 1st specialization subject – specialized subjects of the 2nd specialization subject	-0.448	1.000

Table 9: Preparedness for Continuous Teaching Practice II from the Perspective of Selected Subjects

Subject	N	Mean rank	AM	SD	Me	Mod	Min	Max	Friedman Test	p-value
pedagogy	111	3.39	3.86	0.96	4.00	4.00	1.00	5.00	27.935	0.000
psychology	111	3.11	3.73	0.99	4.00	4.00	1.00	5.00		
subject didactics (1. AP)	111	3.38	3.86	0.96	4.00	4.00	1.00	5.00		
subject didactics (2. AP)	111	3.55	3.92	0.99	4.00	4.00	1.00	5.00		
specialized subjects (1. AP)	111	3.72	4.05	0.95	4.00	5.00	2.00	5.00		
specialized subjects (2. AP)	111	3.85	4.12	0.92	4.00	5.00	2.00	5.00		
Pairwise Comparisons									Dunn-Bonferroni Post Hoc Test	Adjusted Significance
psychology – subject didactics of the 1st specialization subject									-1.058	1.000
psychology – pedagogy									1.112	1.000
psychology – subject didactics of the 2nd specialization subject									-1.722	1.000
psychology – specialized subjects of the 1st specialization subject									-2.422	0.232
psychology – specialized subjects of the 2nd specialization subject									-2.942	0.049
subject didactics of the 1st specialization subject – pedagogy									0.054	1.000
subject didactics of the 1st specialization subject – subject didactics of the 2nd specialization subject									-0.664	1.000
subject didactics of the 1st specialization subject – specialized subjects of the 1st specialization subject									-1.363	1.000
subject didactics of the 1st specialization subject – specialized subjects of the 2nd specialization subject									-1.883	0.895
pedagogy – subject didactics of the 2nd specialization subject									-0.610	1.000
pedagogy – specialized subjects of the 1st specialization subject									-1.309	1.000
pedagogy – specialized subjects of the 2nd specialization subject									-1.830	1.000
subject didactics of the 2nd specialization subject – specialized subjects of the 1st specialization subject									-0.700	1.000
subject didactics of the 2nd specialization subject – specialized subjects of the 2nd specialization subject									-1.220	1.000
specialized subjects of the 1st specialization subject – specialized subjects of the 2nd specialization subject									-0.520	1.000

Table 10: Student Satisfaction with Their Performance as a Teacher During Previous Teaching Practices

Type of Practice	N	Mean rank	AM	SD	Me	Mod	Min	Max	Friedman Test	p-value
MPPb	111	1.85	3.87	0.79	4.00	4.00	1.00	5.00	11.575	0.003
MPPc	111	1.98	3.97	0.92	4.00	4.00	1.00	5.00		
MPPd	111	2.17	4.08	0.75	4.00	4.00	2.00	5.00		
Pairwise Comparisons									Dunn-Bonferroni Post Hoc Test	Adjusted Significance
MPPb – MPPc									-0.940	1.000
MPPb – MPPd									-2.383	0.052
MPPc – MPPd									-1.443	0.447

Table 11: Necessity of Teaching Practices in the Practical Professional Preparation of Future Teachers

Type of Practice	N	Mean rank	AM	SD	Me	Mod	Min	Max	Friedman Test	p-value
MPPa	111	2.01	4.07	0.93	4.00	4.00	1.00	5.00	100.813	0.000
MPPb	111	2.14	4.19	0.81	4.00	4.00	2.00	5.00		
MPPc	111	2.98	4.77	0.47	5.00	5.00	3.00	5.00		
MPPd	111	2.87	4.69	0.61	5.00	5.00	2.00	5.00		
Pairwise Comparisons									Dunn-Bonferroni Post Hoc Test	Adjusted Significance
MPPa – MPPb									-0.728	1.000
MPPa – MPPd									-4.939	0.000
MPPa – MPPc									-5.563	0.000
MPPb – MPPd									-4.211	0.000
MPPb – MPPc									-4.835	0.000
MPPd – MPPc									0.624	1.000

Table 12: Level of Students' Professional Competencies in the Area of "Student"

Professional competencies	N	Mean rank	AM	SD	Me	Mod	Min	Max	Friedman Test	p-value
Identification of the developmental and individual characteristics of the student	111	2.08	3.46	0.97	4.00	4.00	1.00	5.00	3.754	0.153
Identification of psychological and social factors in student learning	111	1.98	3.37	1.01	3.00	3.00	1.00	5.00		
Identification of the socio-cultural context of student development	111	1.94	3.35	0.97	3.00	3.00	1.00	5.00		

Table 13: Level of Students' Professional Competencies in the Area of "Educational Process"

Professional competencies	N	Mean rank	AM	SD	Me	Mod	Min	Max	Friedman Test	p-value
Mastery of the content and didactics of teaching subjects	111	2.37	3.74	0.87	4.00	4.00	1.00	5.00	9.867	0.020
Planning and designing instruction	111	2.47	3.79	0.85	4.00	4.00	1.00	5.00		
Implementation of teaching	111	2.72	3.95	0.76	4.00	4.00	1.00	5.00		
Assessment of the process and outcomes of teaching and student learning	111	2.44	3.77	0.82	4.00	4.00	1.00	5.00		
Pairwise Comparisons										
Mastery of the content and didactics of teaching subjects – Assessment of the process and outcomes of teaching and student learning									-0.416	1.000
Mastery of the content and didactics of teaching subjects – Planning and designing instruction									-0.572	1.000
Mastery of the content and didactics of teaching subjects – Implementation of teaching									-2.028	0.256
Assessment of the process and outcomes of teaching and student learning – Planning and designing instruction									0.156	1.000
Assessment of the process and outcomes of teaching and student learning – Implementation of teaching									1.612	0.642
Planning and designing instruction – Implementation of teaching									-1.456	0.873

Table 14: Level of Students' Professional Competencies in the Area of "Professional Development"

Professional competencies	N	AM	SD	Me	Mod	Min	Max	Wilcoxon test (Z)	p-value
Planning and implementing one's professional growth and self-development	111	3.56	0.87	4.00	4.00	1.00	5.00	-2.884	0.004
Identification with the professional role and the school	111	3.75	1.00	4.00	4.00	1.00	5.00		

Table 15: Assessment of Teaching Practice Conditions by Students at the Training School

Conditions	N	Mean rank	AM	SD	Me	Mod	Min	Max	Friedman Test	p-value
Equipment of classrooms and laboratories	93	3.53	3.96	0.88	4.00	4.00	1.00	5.00	50.298	0.000
Material-didactic resources for teaching curriculum topics	93	3.67	3.99	0.93	4.00	4.00	1.00	5.00		
Timetable	93	3.67	4.00	0.77	4.00	4.00	2.00	5.00		
Composition of classes	93	3.68	4.01	0.77	4.00	4.00	2.00	5.00		
Space for the trainee (office, staff room, workspace)	93	3.85	4.05	0.90	4.00	4.00	2.00	5.00		

Opportunities to participate in other school activities	93	2.59	3.42	1.06	4.00	4.00	1.00	5.00		
Pairwise Comparisons									Dunn-Bonferroni Post Hoc Test	Adjusted Significance
Opportunities to participate in other school activities – Equipment of classrooms and laboratories									3.429	0.009
Opportunities to participate in other school activities – Timetable									3.919	0.001
Opportunities to participate in other school activities – Material-didactic resources for teaching curriculum topics									3.939	0.001
Opportunities to participate in other school activities – Composition of classes									3.978	0.001
Opportunities to participate in other school activities – Space for the trainee (office, staff room, workspace)									4.605	0.000
Equipment of classrooms and laboratories – Timetable									-0.490	1.000
Equipment of classrooms and laboratories – Material-didactic resources for teaching curriculum topics									-0.510	1.000
Equipment of classrooms and laboratories – Composition of classes									-0.549	1.000
Equipment of classrooms and laboratories – Space for the trainee (office, staff room, workspace)									-1.176	1.000
Timetable – Material-didactic resources for teaching curriculum topics									0.020	1.000
Timetable – Composition of classes									-0.059	1.000
Timetable – Space for the trainee (office, staff room, workspace)									-0.686	1.000
Material-didactic resources for teaching curriculum topics – Composition of classes									-0.039	1.000
Material-didactic resources for teaching curriculum topics – Space for the trainee (office, staff room, workspace)									-0.666	1.000
Composition of classes – Space for the trainee (office, staff room, workspace)									-0.627	1.000

* The frequency (N) in the table is lower than 111 because not all respondents were able to provide a relevant answer to the given question.

Table 16: Mentor Teacher's Approach to the Student During Teaching Practice

Components of the Approach	N	Mean rank	AM	SD	Me	Mod	Min	Max	Friedman Test	p-value
Interest in the trainee	111	5.26	4.51	0.69	5.00	5.00	2.00	5.00	33.606	0.000
Motivating the trainee for the teacher's role	111	4.77	4.37	0.82	5.00	5.00	1.00	5.00		
Acceptance of the trainee's autonomy	111	4.88	4.41	0.78	5.00	5.00	2.00	5.00		
Providing information about the class composition	111	4.73	4.38	0.74	5.00	5.00	2.00	5.00		
Providing materials for lesson preparation and implementation	111	5.27	4.50	0.76	5.00	5.00	1.00	5.00		
Approach to the trainee in front of students	111	5.27	4.51	0.69	5.00	5.00	2.00	5.00		
Allowing the trainee to implement chosen teaching strategies and methods	111	5.15	4.48	0.70	5.00	5.00	3.00	5.00		
Approach to the trainee during lesson analysis	111	5.18	4.47	0.80	5.00	5.00	1.00	5.00		
Quality of the lesson analysis	111	4.49	4.30	0.90	5.00	5.00	1.00	5.00		
Pairwise Comparisons										
Quality of the lesson analysis – Providing information about the class composition									0.674	1.000
Quality of the lesson analysis – Motivating the trainee for the teacher's role									0.772	1.000
Quality of the lesson analysis – Acceptance of the trainee's autonomy									1.078	1.000
Quality of the lesson analysis – Allowing the trainee to implement chosen teaching strategies and methods									1.801	1.000
Quality of the lesson analysis – Approach to the trainee during lesson analysis									1.899	1.000
Quality of the lesson analysis – Interest in the trainee									2.108	1.000
Quality of the lesson analysis – Providing materials for lesson preparation and implementation									2.120	1.000
Quality of the lesson analysis – Approach to the trainee in front of students									2.120	1.000
Providing information about the class composition – Motivating the trainee for the teacher's role									0.098	1.000
Providing information about the class composition – Acceptance of the trainee's autonomy									0.404	1.000
Providing information about the class composition – Allowing the trainee to implement chosen teaching strategies and methods									-1.127	1.000
Providing information about the class composition – Approach to the trainee during lesson analysis									-1.225	1.000
Providing information about the class composition – Interest in the trainee									1.434	1.000
Providing information about the class composition – Approach to the trainee in front of students									-1.446	1.000
Providing information about the class composition – Providing materials for lesson preparation and implementation									-1.446	1.000

Motivating the trainee for the teacher's role – Acceptance of the trainee's autonomy	-0.306	1.000
Motivating the trainee for the teacher's role – Allowing the trainee to implement chosen teaching strategies and methods	-1.029	1.000
Motivating the trainee for the teacher's role – Approach to the trainee during lesson analysis	-1.127	1.000
Motivating the trainee for the teacher's role – Interest in the trainee	1.336	1.000
Motivating the trainee for the teacher's role – Approach to the trainee in front of students	-1.348	1.000
Motivating the trainee for the teacher's role – Providing materials for lesson preparation and implementation	-1.348	1.000
Acceptance of the trainee's autonomy – Allowing the trainee to implement chosen teaching strategies and methods	-0.723	1.000
Acceptance of the trainee's autonomy – Approach to the trainee during lesson analysis	-0.821	1.000
Acceptance of the trainee's autonomy – Interest in the trainee	1.029	1.000
Acceptance of the trainee's autonomy – Providing materials for lesson preparation and implementation	-1.042	1.000
Acceptance of the trainee's autonomy – Approach to the trainee in front of students	-1.042	1.000
Allowing the trainee to implement chosen teaching strategies and methods – Approach to the trainee during lesson analysis	-0.098	1.000
Allowing the trainee to implement chosen teaching strategies and methods – Interest in the trainee	0.306	1.000
Allowing the trainee to implement chosen teaching strategies and methods – Providing materials for lesson preparation and implementation	0.319	1.000
Allowing the trainee to implement chosen teaching strategies and methods – Approach to the trainee in front of students	0.319	1.000
Approach to the trainee during lesson analysis – Interest in the trainee	0.208	1.000
Approach to the trainee during lesson analysis – Providing materials for lesson preparation and implementation	0.221	1.000
Approach to the trainee during lesson analysis – Approach to the trainee in front of students	0.221	1.000
Interest in the trainee – Approach to the trainee in front of students	-0.012	1.000
Interest in the trainee – Providing materials for lesson preparation and implementation	-0.012	1.000
Providing materials for lesson preparation and implementation – Approach to the trainee in front of students	0.000	1.000

4 Discussion and conclusion

Regarding RQ1, we conclude that a statistically significant difference in student satisfaction was identified between MPPa and MPPd. On average, respondents reported being more satisfied with MPPa.

The observation-pedagogical-psychological practice at the Faculty of Arts, UPJŠ, is organized by the Department of Pedagogy in cooperation with the Department of Educational Psychology and Health Psychology. Before beginning their practice, teacher training students receive instructions with precise guidelines on which educational phenomena to observe and how to record them. Students are provided with supporting materials that operationalize and facilitate the process of registering student and teacher behavior during lessons. Additionally, this type of practice includes a final seminar where students evaluate the course of MPPa, highlight which aspects were fulfilled (what activities teachers performed during teaching and what they managed to monitor), and discuss whether they understood the importance of observing lessons led by more experienced teachers (experts) within the gradation model of pedagogical practice. This observation is one of the significant reflective methods that, especially for novice teachers, supports identification with a certain teaching model and professional adaptation. Regarding the Continuous Teaching Practice II, it is primarily managed by subject didactics experts. However, there seems to be a lack of a unified approach to the conception and implementation of this type of practice (e.g., supporting materials, such as observation sheets and sets of self-diagnostic questions based on taxonomies, may vary between departments). It is also important to emphasize that for the first three types of practice, students are assigned to mentor teachers through the practice coordinator, who selects them based on their experience and student feedback, thereby minimizing issues with the practice process.

Regarding RQ2, we conclude that a statistically significant difference was identified in student satisfaction with the organization of teaching practices by teachers, psychologists, and subject didactics experts between MPPd and MPPb, and

between MPPd and MPPa. In both cases, respondents generally reported being less satisfied with MPPd.

The observation-pedagogical-psychological practice and interim teaching practice are quite standardized in terms of form, content, and organization, meaning that all teacher training students have relatively equal conditions for completing them (they know what will be expected of them and what final output they will be evaluated on, regardless of their specialization). These first two types of practices focus primarily on student observations and their analysis. During the interim teaching practice, students have only one independent teaching output. Continuous Teaching Practice II, on the other hand, is differentiated depending on the subject didactics experts overseeing it, and students are left to choose their own training elementary or secondary school. In this case, they also interact with mentor teachers with whom the Faculty of Arts, UPJŠ, does not maintain contact or close cooperation (they are not on the list of teachers regularly providing teaching practice opportunities; their approach to students and interest in their professional-educational needs are unknown). The Department of Pedagogy and the Department of Educational Psychology and Health Psychology intervene the least in this type of practice, although students are provided with preliminary instructions and recommendations before it begins (e.g., how to get involved in school life and the school's operations). However, they do not guide students in lesson preparation or the appropriate use of didactic tools for the given class. Students often report that Continuous Teaching Practice II conflicts with the period when they are finalizing their theses, preventing them from focusing adequately on preparing model lessons for the teaching practice. Kiggundu and Nayimuli (2009) explored the experiences of teacher training students during their 10-week practice, focusing on how these experiences influenced their perception of the teaching profession. Despite the positive experiences, future teachers also faced challenges. In some schools, they felt unaccepted by other educators and had to play dual roles (teacher and student), resulting in increased pressure on them.

Regarding RQ3, we conclude that a statistically significant difference was identified in student satisfaction with the scope of observations between MPPd and MPPc, MPPd and MPPb, and

MPPd and MPPa. In all three cases, respondents generally reported being less satisfied with MPPd.

Although the number of observations (monitoring teachers' educational activities) decreases with a higher level of practice, it remains a crucial component of the practical preparation of a novice teacher. Observations serve to inspire students on how to handle educational and instructional challenges when working with students or to compare learned theories and educational concepts with their application in practice. The observed differences may suggest that students would welcome a reduction in the number of observations and an increase in independent teaching outputs. However, it is important to note that including observations in each type of practice has its rationale, as students may start their practice with a different mentor teacher each time. Therefore, in the initial phase, it is essential to observe the conditions under which teaching is conducted, how experienced teachers manage the course of the lesson, and how they interact with students (how they communicate, assess, and what teaching style they prefer). Referring to the taxonomy of psychomotor objectives (Dave, 1970 In Petlák, 2016), before engaging in pedagogical-didactic activities, it is advisable to first prepare for them, practice them, and only after mastering individual tasks proceed to their comprehensive implementation.

Regarding RQ4, we conclude that a statistically significant difference was identified in student satisfaction with the scope of independent outputs between MPPd and MPPc. On average, respondents reported being more satisfied with MPPc.

Similarly, to the discussion of the response to RQ3, while the number of independent outputs increases with a higher level of practice, this feedback from students may indicate that it would be more beneficial for them to increase the number of independent outputs specifically in Continuous Teaching Practice II (at an appropriate time outside of other study obligations). This information should prompt a reflection on the logistics of practice organization by the university and its potential to expand cooperation with additional training schools. However, this presents only one perspective, as this practice model is well-established in Slovakia, and university studies are structured rather than continuous, with a division between theoretical and practical preparation. This raises the question of how the university can influence this matter and how it can compensate for it (e.g., creating activities within various pedagogical disciplines that allow students to try out educational activities with students in school educational institutions). A suitable alternative to consider is the implementation of practices within extracurricular activities (if we consider events organized by various civic associations, etc.).

Regarding RQ5, we conclude that no statistically significant difference was identified in student satisfaction with the fulfillment of the mission and objectives of the teaching practices.

We primarily attribute this to the fact that before each practice, a meeting is held with the students where, as mentioned earlier, they are provided with didactic and diagnostic materials (in the case of MPPc and MPPd, these are provided by didactics experts according to the subject). Additionally, they are informed about the specific focus of each practice, how it contributes to the development of professional skills, and how it relates to the structure of their field of study. Each practice has a set objective, recommendations for its implementation, and a defined outcome regarding what students should be able to handle after its completion and how they should approach reflecting on educational experiences (in cooperation with the mentor teacher). Although we remain in the realm of assumptions, students likely perceive a connection between these practices and their studies, in other words, the expansion of knowledge from specialized, pedagogical, and psychological subjects, along with their verification and reconstruction during teaching practice. Msangya et al. (2016) used semi-structured questionnaires to explore the perspectives of teacher training

students regarding their experiences with teaching practice. The findings indicate that future teachers perceived practice as an important tool that supported the development of their teaching skills, preparing them for the real world of work in schools. Nevertheless, the study recommends more thorough supervision and building a strong university partnership with local schools, which is the primary goal of the Faculty of Arts, UPJŠ (in organizing practices).

Regarding RQ6, we conclude that a statistically significant difference was identified in students' preparedness for the observation-pedagogical-psychological practice. On average, respondents reported being more prepared in pedagogy than in psychology.

It is clear that this will also depend on the nature of the subjects represented in the teacher training curriculum and how the students themselves assess the urgency/necessity of their knowledge in relation to this type of practice in primary and secondary schools. The difficulty of noticing pedagogical phenomena is generally lower (e.g., the didactic methods used, organizational forms, assessment) than that of psychological phenomena (e.g., being able to determine the prevailing classroom climate or the effectiveness of the teacher's methods in relation to student learning and engagement). This requires more frequent practice and a holistic approach to teaching, where students do not focus solely on selected activities but are able to reflect on the educational process with attention to details (e.g., "What did the teacher do?" "What did the students do?" "How did the teacher feel?" "How did the students feel?") (Koster & Korthagen, 2011; Kouteková, 2011).

Regarding RQ7, we conclude that a statistically significant difference was identified in students' preparedness for the interim teaching practice between subject didactics of the 1st specialization subject and specialized subjects of the 1st specialization subject, between subject didactics of the 1st specialization subject and specialized subjects of the 2nd specialization subject, and between subject didactics of the 2nd specialization subject and specialized subjects of the 2nd specialization subject. On average, respondents reported being more prepared in specialized subjects.

Teacher training students encounter subject didactics only during their master's studies (after the winter semester, they have completed only general didactics, and subject didactics typically come later). Therefore, during their bachelor's studies, they have only limited exposure to teaching strategies (e.g., in general pedagogy, educational diagnostics, theory of education), whether it involves lesson planning, didactic analysis of content, the use of methods in various stages of a lesson, or student assessment and evaluation. They gradually (often implicitly) develop the ability to carry out the didactic transformation of scientific information and knowledge in a way that conveys it to students in a simplified and systematic form, enabling students to develop their knowledge, skills, and habits. One possible solution would be to change the placement of teaching practices in study programs (e.g., introducing MPPa during the bachelor's program), which, however, is challenging to implement given the current study model. Another option is to design most pedagogical (and even psychological) courses and subject didactics so that students are evaluated based on practical outputs (focusing not just on mastering theory but also on applying it during practical exercises). This approach is used, for instance, in the implementation of general didactics.

Regarding RQ8, we conclude that no statistically significant difference was identified in students' preparedness for Continuous Teaching Practice I with respect to pairwise comparisons.

With the completion of additional courses related to pedagogy and subject didactics, teacher training students sequentially expand their knowledge, which forms the foundation for developing professional competencies and demonstrating them in practice in line with professional standards. This may not be

the only reason for the results we obtained. The number of independent outputs in this type of practice is significantly higher (18 hours per specialization subject) compared to interim teaching practice (1 hour per specialization subject). Therefore, students may have gained a more thorough understanding of their preparedness for practice, even in subjects forming the core of teacher training (e.g., whether and how they can address various educational problems based on previous theory and experiences, which arise from interactions with students and their learning needs).

Regarding RQ9, we conclude that a statistically significant difference was identified in students' preparedness for Continuous Teaching Practice II between psychology and specialized subjects of the 2nd specialization subject. On average, respondents reported being more prepared in the specialized subjects of the 2nd specialization subject.

On one hand, this may relate to which psychology courses are mandatory for students and which they choose to study based on their practical professional needs. On the other hand, it raises the question of whether students are being adequately prepared to analyze the conditions, process, and student work during lesson evaluations from the perspective of various psychological disciplines (e.g., ontogenetic psychology, educational psychology, social psychology). As mentioned in the commentary on RQ6, the need to understand psychological principles in teaching and student learning including the perception and differentiation of key factors influencing the effectiveness of education – becomes increasingly pressing with more teaching practice. Initially, a novice teacher focuses mainly on managing the lesson content, but later, once they feel confident in that aspect, they may wish to adopt a more global perspective on the classroom. In older practice models, it was common for both the subject didactics expert and a psychologist to attend the student's teaching output, where they, along with the student teacher, would evaluate the pedagogical-didactic activities in terms of professional competencies related to the educational process and students (considering what happened in the classroom, the atmosphere, and how the student used methods to activate and motivate students).

Regarding RQ10, we conclude that no statistically significant difference was identified in student satisfaction with their performance as a teacher during previous teaching practices with respect to pairwise comparisons.

Behind this result, we see the initiative of the didactics experts (not limited to the departments overseeing the teacher training core) to prepare students for the various types of practice. This includes a tendency toward jointly solving issues related to practices, with didactics experts from departments consulting the coordinator of teaching practices when there are changes in mentor teachers and after evaluating student feedback. This may later influence students' responsible selection of mentor teachers (in MPPd), as they are informed about how and in what ways a mentor teacher should support them and which mentor could serve as a reflective practitioner (a teacher who pays attention to lesson analysis, evaluation, and structuring of educational experiences). This is also supported by the research results presented in Table 16, where respondents assessed the approach of mentor teachers in their previous teaching practices. None of the components of the mentor teacher's approach to the trainee stood out significantly.

Regarding RQ11, we conclude that a statistically significant difference was identified in the perceived necessity of teaching practices for students in the practical professional preparation of future teachers between MPPa and MPPd, MPPa and MPPc, MPPb and MPPd, and MPPb and MPPc. On average, respondents indicated that MPPc and MPPd are more necessary.

This is understandable, considering the number of independent outputs students carry out in each type of practice. However, observations also have their significance in teaching practice

(Hupková, 2006; Rys, 1975). Developing functional literacy, where an individual applies learned knowledge to independently address problems and discrepancies, initially relies on successfully mastering the techniques of selected activities and understanding their importance for the effectiveness of educational work. In teacher preparation (as well as for students), didactic principles of adequacy, clarity, continuity, and progression are taken into account. Understanding and accepting this analogy serves as a platform for students to develop professional competencies (e.g., the content and scope of these competencies are modified with a higher career level of the educational employee).

Regarding RQ12, we conclude that no statistically significant difference was identified in the level of students' professional competencies in the area of "student".

All three professional competencies under this area, if generalized, relate to understanding and assessing the conditions of education, which, as derived from the theory of general didactics and pedagogical diagnostics, represent a multifaceted complex of both educational and non-educational phenomena associated with the abilities and capacities of students and the teacher. Although there is no noticeable difference in how respondents rated their level, attention should be directed to comparing measures of central tendency between these competencies and those categorized under the areas of the educational process and professional development. We are operating at a descriptive level, but it is noticeable that recognizing educational factors that frame the course and nature of the educational process appears to be relatively more challenging and requires more extended practice (reflected experience). Pedagogical diagnostics must not remain solely at an intuitive level; it must have a scientific and professional foundation (planning its implementation, utilizing other forms of diagnostics besides didactic, using valid diagnostic methods). Currently, as teachers face pressure to implement the concept of inclusive education in schools, as outlined in the "Strategy for an Inclusive Approach in Education" (2021), this is a key priority in preparing teacher training students for practice. The goal is for them to adopt the role of inclusive educators (developing self-efficacy and competencies in this area) (Lechta et al., 2012). The study by Liu et al. (2022), which focuses on the teaching experiences of student teachers, demonstrates that after their internship, they were still more self-focused, even though they recognized the importance of focusing on students and their educational needs during teaching.

Regarding RQ13, we conclude that no statistically significant difference was identified in the level of students' professional competencies in the area of "educational process" with respect to pairwise comparisons.

These are the core competencies that define a teacher as a didactics expert responsible for planning, preparation, execution, and evaluation of the educational process. Along with diagnostic and reflective competencies, they form the foundation for optimizing teaching. The fact remains that in teaching practice, given its time and scope limitations, students primarily focus on developing skills related to processing and conveying subject matter to students and verifying the level of its acquisition by them. However, they may perceive these competencies in a simplified manner because they involve a complex set of activities that extend beyond direct teaching (the student's performance during a lesson is focused on the informational aspect but less on the formative or curricular/content aspects), which stems from the limitation mentioned earlier (number of independent outputs). Professional competencies, of course, are based on professional standards, but it would be beneficial to more precisely define the elements (knowledge, skills) that represent them. Komba and Kira (2013) examined the effectiveness of teaching practice in terms of improving student teachers' teaching skills. The findings suggest that the length of the practice was insufficient for acquiring the competencies necessary for effective teaching. Supervisors during the practice were not flexible enough to discuss with student teachers their

strengths and weaknesses observed during teaching. Of the total number of participants, 76% stated that teaching practice did not help them improve as future teachers.

Regarding RQ14, we conclude that a statistically significant difference was identified in the professional competencies of students in the area of “professional development”. On average, respondents reported a higher level of competency in identifying with the professional role and the school compared to planning and implementing their professional growth and self-development.

Planning and implementing professional growth and self-development are not only connected to teachers' length of practice and their experience in educating students, but professional adaptation of the novice teacher (career progression) and the identification or definition of current educational needs aligned with the needs of the school, its educational philosophy, culture, and policy, also play a crucial role. Teachers often lack professional support from experienced mentor teachers, who could assist them in self-reflection and self-evaluation of their teaching performance. Identifying with the professional role and the school remains the starting point. Zhao and Zhang (2017) investigated how field teaching practice affects the professional identity of teachers in the preparatory phase. The research results showed that, compared to the period before field teaching, the professional identity of novice teachers increased after completing the practice, specifically in terms of the growth of inner value identity, which was also supported by mentors. The practice also contributed to the professional engagement of novice teachers (students), enhancing their emotional assessment and confidence in the teaching profession.

Regarding RQ15, we conclude that a statistically significant difference was identified in the assessment of teaching practice conditions by students at the training school between the opportunities to participate in additional school activities and the equipment of classrooms and laboratories, the timetable, the composition of classes, the material and technical resources for teaching curriculum topics, and the space for the trainee. On average, respondents rated the opportunities to participate in additional school activities lower.

The teaching profession is often limited to the area of instruction and related tasks. However, it is teachers who contribute to shaping the school climate and maintaining the tendencies and values that define the school as an educational institution responsive to current societal trends and the needs of individuals/students. This is why teacher training students should be involved in the life of the school, which ultimately depends on the primary goals of teaching practices (such as participating in school-organized events – excursions, trips, training, etc.). It is also important to remember that teachers are qualified to perform the roles of a teaching assistant or educator.

Regarding RQ16, we conclude that no statistically significant difference was identified in the mentor teacher's approach (its components) to the student during teaching practice with respect to pairwise comparisons.

This result leads us to believe that efforts toward uniformity in organizing teaching practices, closer collaboration with mentor teachers in elementary and secondary schools, understanding their specific characteristics, and their potential contribution to shaping teacher training students play a significant role in the professional preparation of future teachers. The mentor teacher should serve both as a role model and a mentor (consultant, facilitator, etc.). Since the Dunn-Bonferroni post hoc test is conservative and, in this case, it was the largest number of pairwise comparisons, which increases the occurrence of a type II error, we could consider, given the value of the mean rank and the arithmetic mean, that it proves to be appropriate to work on unification of quality of the lesson analysis conducted by mentors and student teachers. Caires et al. (2012) analyzed student teachers' perceptions of teaching practice (their feelings, insights). The research results highlight some difficulties

encountered during this period (stress, feelings of fatigue, vulnerability), but also the growing knowledge and skills of student teachers, as well as a more developed sense of flexibility in performance and interactions. Students also positively evaluated the guidance and support from their supervisors.

Tóblová and Krištofiaková (2021) provide several key recommendations for improving interim teaching practice, drawing inspiration from the final evaluation analysis by Gubicová and Bizová (2016). These include identifying weaknesses in the organization of practice (on the part of training schools and mentors), expanding practice in institutions involved in extracurricular education (at least observations in school clubs for children), placing practice in a larger number of training schools (so students can compare them in terms of student social structure or the quality of the educational process), maximizing the scope of interim practice (seeking suitable alternatives), introducing interim practice into the lower years of study (to connect the theoretical and practical components of teacher preparation early), and updating the list of mentor teachers based on student feedback. The Faculty of Arts and the Faculty of Science, UPJŠ, have long reflected these recommendations, but as the research results indicate, addressing other critical points is necessary. These include ensuring uniformity in the setup of practices (in terms of broader cooperation between departments) (MPPc, MPPd), adjusting the ratio of observations to direct educational activities of students during practice (MPPb, MPPc, and MPPd), providing more thorough preparation for practice in psychology (MPPa, MPPd) and subject didactics (MPPb), focusing on enhancing students' diagnostic skills, and encouraging training schools to involve students in other activities (not limited to teaching). The number of teaching practice hours for teacher training students in Slovakia is extremely low compared to Finland (almost incomparable), but three approaches could serve as inspiration and are considered prerequisites for the success of university education for future teachers: a continuous connection with the school (school-based; starting at the bachelor's level), personal experimentation – innovation (experimental personal-based), and solving problems and situations from educational practice (problem-based, case-specific) (Sahlberg, 2010 In Kosová, 2016). We are, of course, aware of the research limitations, such as the available sample of respondents (students of natural sciences predominated, representing almost half of the sample, followed by students of other fields), the research tool used (whose validity and reliability are questionable), and the potential for biased responses (the questionnaire was anonymous, but the students had not yet completed their studies, which might have affected the reliability of their answers).

Literature:

1. Baeten, M., Simons, M. Innovative Field Experiences in Teacher Education: Student-Teachers and Mentors as Partners in Teaching. *International Journal of Teaching and Learning in Higher Education* [online]. 2016, 28(1), 38–51 [cit. 2023-05-31]. ISSN 1812-9129. Available: <https://files.eric.ed.gov/fulltext/EJ1106337.pdf>
2. Caires, S., Almeida, L., Vieira, D. Becoming a teacher: student teachers' experiences and perceptions about teaching practice. *European Journal of Teacher Education* [online]. 2012, 35(2), 163–178 [cit. 2023-05-20]. ISSN 1469-5928. <https://doi.org/10.1080/02619768.2011.643395>
3. Černá, M., Pišová, M., Vlčková, K. Vliv klinické zkušenosti na profesní rozvoj studentů učitelství. *Studia paedagogica* [online]. 2017, 22(3), 41–68 [cit. 2023-06-01]. ISSN 2336-4521. <https://doi.org/10.5817/SP2017-3-4>
4. Danek, J. Pedagogická prax – miesto, prínos a význam v procese prípravy budúcich učiteľov. *Slavonic Pedagogical Studies Journal* [online]. 2019, 8(1), 31–41 [cit. 2023-05-22]. ISSN 1339-9055. <https://doi.org/10.18355/PG.2019.8.1.3>
5. Gabrhelová, G., Marks, I., Geršicová, Z. Analýza reflexií a sebareflexií pedagogickej praxe študentov. *STUDIA SCIENTIFICA FACULTATIS PAEDAGOGICAE* [online]. 2020, 19(5), 22–41 [cit. 2023-05-31]. ISSN 1336-2232. Available:

- http://studiascientifica.ku.sk/wp-content/uploads/2021/01/ssf_5_20_s_obalkou.pdf
6. Hupková, M. *Profesijná sebareflexia učiteľov*. Nitra: UKF, 2006. 203 p. ISBN 80-8094-028-2.
 7. Jaspers, W. M., Prins, F., Meijer, P. C., Mainhard, T., Wubbels, T. Mentor teachers' intended intervening during student teachers' lessons: A vignette study in Dutch primary education. *Teaching and Teacher Education* [online]. 2022, 117, 103342 [cit. 2023-05-31]. ISSN 1879-2480. <https://doi.org/10.1016/j.tate.2021.103342>
 8. Kiggundu, E., Nayimuli, S. Teaching practice: a make or break phase for student teachers. *South African Journal of Education* [online]. 2009, 29(3), 345–358 [cit. 2023-04-03]. ISSN 2076-3433. <https://doi.org/10.15700/saje.v29n3a129>
 9. Komba, S. C., Kira, E. S. The Effectiveness of Teaching Practice in Improving Student Teachers' Teaching Skills in Tanzania. *Journal of Education and Practice* [online]. 2013, 4(1), 157–163 [cit. 2023-04-19]. ISSN 2222-288X. Available: <https://www.iiste.org/Journals/index.php/JEP/article/view/4058>
 10. Kontírová, S. Pedagogická prax – organizačná forma pregraduálnej prípravy nastávajúcich učiteľov. In: *Pedagogická prax študentov učiteľstva akademických predmetov* [online]. Košice: UPJŠ, 2010 [cit. 2023-05-25]. pp. 8–13. ISBN 978-80-7097-834-4. Available: <https://unibook.upjs.sk/img/cms/2010/ff/Pedagogicka-prax-studentov-ucitelstva-akademickych-predmetov.pdf>
 11. Koster, B., Korthagen, F. Příprava vzdělavatelů učitelů pro realistický přístup. In: *Jak spojit praxi s teorií: Didaktika realističtého vzdělávání učitelů*. Brno: Paido, 2011. pp. 229–242. ISBN 978-80-7315-221-5.
 12. Kosová, B. Profesijná príprava budúcich učiteľov a cvičný učiteľ vo svetle medzinárodných trendov. In: *Učiteľské praxe – súčasné poznatky a perspektívy (Sborník z konferencie)* [online]. Brno: Masarykova univerzita PF, 2016 [cit. 2023-05-06]. pp. 17–29. ISBN 978-80-210-8274-8. <https://doi.org/10.5817/CZ.MUNI.P210-8274-2016>
 13. Kouteková, M. *Základy pedagogickej diagnostiky*. 3rd ed. Banská Bystrica: PF UMB, 2011. 99 p. ISBN 978-80-557-0148-6.
 14. Kubiátko, M. Bol Likert ordinalista alebo intervalista? Chyby pri tvorbe a vyhodnocovaní Likertových škál. *Pedagogika.sk* [online]. 2016, 7(3), 177–190 [cit. 2023-03-03]. ISSN 1338-0982. Available: <https://www.casopispedagogika.sk/studie/kubiátko-milan-bol-likert-ordinalista-alebo-intervalista-chyby-pri-tvorbe-a-vyhodnocovaní-likertovych-skál.html>
 15. Kyriacou, C., Stephens, P. Student Teachers' Concerns During Teaching Practice. *Evaluation & Research in Education* [online]. 1999, 13(1), 18–31 [cit. 2023-01-27]. ISSN 1747-7514. <https://doi.org/10.1080/09500799908666943>
 16. Lechta, V. et al. *Inkluzívna edukácia ako multidimenzionálny výchovný problém*. Bratislava: IRIS, 2012. 233 p. ISBN 978-80-89256-82-2.
 17. Liu, M., Zwart, R., Bronkhorst, L., Wubbels, T. Chinese student teachers' beliefs and the role of teaching experiences in the development of their beliefs. *Teaching and Teacher Education* [online]. 2022, 109, 103525 [cit. 2023-02-27]. ISSN 1879-2480. <https://doi.org/10.1016/j.tate.2021.103525>
 18. McIntyre, D., Hagger, H. Professional development through the Oxford Internship model. *British Journal of Educational Studies* [online]. 1992, 40(3), 264–283 [cit. 2023-05-21]. ISSN 1467-8527. <https://doi.org/10.1080/00071005.1992.9973930>
 19. Ministerstvo školstva, vedy, výskumu a športu. *Stratégia inkluzívneho prístupu vo výchove a vzdelávaní* [online]. Bratislava: MŠVVaŠ, 2021. [cit. 2023-04-25]. 45 p. Available: <https://www.minedu.sk/data/att/928/23120.ae7062.pdf>
 20. Msangya, B. W., Mkombe, S. L., Yihuan, W. Teaching Practice Experience for Undergraduate Student Teachers: A Case Study of the Department of Education at Sokoine University of Agriculture, Tanzania. *Journal of Education and Practice* [online]. 2016, 7(14), 113–118 [cit. 2023-03-18]. ISSN 2222-288X. Available: <https://www.iiste.org/Journals/index.php/JEP/article/view/30647/31486>
 21. Niu, S. J., Niemi, H., Harju, V., Pehkonen, L. Finnish student teachers' perceptions of their development of 21st-century competencies. *Journal of Education for Teaching* [online]. 2021, 47(5), 638–653 [cit. 2023-05-31]. ISSN 1360-0540. <https://doi.org/10.1080/02607476.2021.1951602>
 22. Northfield, J., Gunstone, R. Teacher education as a process of developing teacher knowledge. In *Teaching about teaching: purpose, passion and pedagogy in teacher education*. pp. 48–56. 1997. London: Falmer Press. ISBN 0-7507-0622-8.
 23. Novocký, M., Orosová, R., Petříková, K. *Cvičný učiteľ ako diagnostik a reflexívny praktik*. Košice: UPJŠ, 2021. 154 p. ISBN 978-80-574-0033-2.
 24. Orosová, R., Boberová, Z. *Pregraduálna príprava učiteľov – Organizácia pedagogickej praxe na UPJŠ* [online]. Košice: UPJŠ, 2016 [cit. 2023-04-25]. 142 p. ISBN 978-80-8152-460-8. Available: <https://unibook.upjs.sk/sk/pedagogika/342-pregradu-alna-priprava-ucitelov-organizacia-pedagogickej-praxe-na-upjs>
 25. Ozdemir, A. A., Yildirim, G. The Effects of Teaching Practice Course on Professional Development of Student Teachers. *Procedia – Social and Behavioral Sciences* [online]. 2012, 46, 2550–2555 [cit. 2023-06-01]. ISSN 1877-0428. <https://doi.org/10.1016/j.sbspro.2012.05.520>
 26. Petlák, E. *Všeobecná didaktika*. 3rd ed. Bratislava: IRIS, 2016. 322 p. ISBN 978-80-8153-064-7.
 27. Petrová, G., Duchovičová, J. Vysokoškolská príprava učiteľov v kontexte transformačných procesov. *Lifelong Learning – celoživotní vzdelávaní* [online]. 2013, 3(1), 8–37 [cit. 2023-05-30]. ISSN 1805-8868. <https://doi.org/10.11118/lifele201303018>
 28. *Pokyn ministra č. 39/2017, ktorým sa vydávajú profesijné štandardy pre jednotlivé kategórie a podkategórie pedagogických zamestnancov a odborných zamestnancov škôl a školských zariadení* [online]. 2017 [cit. 2023-02-03]. Available: <https://www.minedu.sk/pokyn-ministra-c-392017-ktorym-sa-vydavaju-profesijne-standardy-pre-jednotlive-kategorie-a-podkategorie-pedagogickych-zamestnancov-a-odbornych-zamestnancov-skol-a-skolskych-zariadeni/>
 29. Rovňanová, L. Subjective evaluation of demands on performance of teacher professional activities. *The New Educational Review* [online]. 2013, 34(4), 292–304 [cit. 2023-02-08]. ISSN 1732-6729. Available: https://www.researchgate.net/publication/339080255_Subjective_Evaluation_of_Demands_on_Performance_of_Teacher_Professional_Activities
 30. Rovňanová, L., Nemcová, L. Integration of theoretical and practical undergraduate training in the processes of developing student teachers' professional competences. *The New Educational Review* [online]. 2017, 47(1), 176–186 [cit. 2023-02-08]. ISSN 1732-6729. <https://doi.org/10.15804/ner.2017.47.1.14>
 31. Rys, S. *Hospitace v pedagogické praxi*. Praha: SPN, 1975. 143 p.
 32. Siroťová, M. *Pedagogická prax v pregraduálnej príprave učiteľov*. Trnava: Univerzita sv. Cyrila a Metoda v Trnave, 2015. 128 p. ISBN 978-80-8105-648-2.
 33. Tóbllová, E., Krištofiaková, L. *Praktická príprava budúcich učiteľov* [online]. Dubnica nad Váhom: Vysoká škola DTI, 2021 [cit. 2023-05-24]. 116 p. ISBN 978-80-8222-036-3. Available: <https://www.dti.sk/data/files/file-1651214001-626b86b1c2946.pdf>
 34. Tomengová, A., Kosová, B., Poliach, V., Pavlov, I., Šukolová, D., Fridrichová, P., Guffová, D., Koróny, S., Haviar, M. *Pedagogické znalosti a profesionalita učiteľa*. Banská Bystrica: Belianus, 2017. 220 p. ISBN 978-80-557-1315-1.
 35. Toom, A., Husu, J., Patrikainen, S. Student teachers' patterns of reflection in the context of teaching practice. *European Journal of Teacher Education* [online]. 2015, 38(3), 320–340 [cit. 2023-01-20]. ISSN 1469-5928. <https://doi.org/10.1080/02619768.2014.943731>
 36. Uçar, M. Y. A Case Study of How Teaching Practice Process Takes Place. *Educational Sciences: Theory & Practice* [online]. 2012, 12(4), 2654–2659 [cit. 2023-03-22]. ISSN 1303-0485. Available: <https://files.eric.ed.gov/fulltext/EJ1002868.pdf>
 37. Zhao, H., Zhang, X. The Influence of Field Teaching Practice on Pre-service Teachers' Professional Identity: A Mixed Methods Study. *Front. Psychol.* [online]. 2017, 8, 1264 [cit. 2023-04-22]. ISSN 1664-1078. <https://doi.org/10.3389/fpsyg.2017.01264>

Primary Paper Section: A

Secondary Paper Section: AM