

### **GLOBED Erasmus+ Joint Master's Degree Thesis**

# Pre-service Teacher Education & Novice Teachers' Sense of Preparedness: Between Academic Knowledge and Soft Skills (Comparative Case Study in the Czech Context)

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### **Abstract**

The thesis responds to how pre-service teacher education shapes novice teachers' sense of preparedness. Qualitative research was conducted as a comparative case study scrutinizing three various pre-service teacher education institutions in the Czech Republic. The Czech Republic currently faces a shortage of teachers and thus a pressing need to solve the situation regarding standards in the teaching profession. Two initial teacher education institutions portray traditional university settings, and the third institution represents an alternate route to teacher certification. The main concepts of pre-service teacher education and sense of preparedness are simplified to 5 comparison elements through the data analysis. The case studies were scrutinized mainly through the data gained from 15 semi-structured interviews and online questionnaires with 15 novice teachers. Findings show that "academically-oriented" parts of pre-service teacher education enhance preparedness in different skills than "professionally-oriented" components of initial teacher training. The main differences are visible between academic/subject knowledge and soft skills. Furthermore, the thesis explains the importance and role of the admission process. Based on the findings, the perceived sense of preparedness is enhanced mainly by teaching practice adequately connected to other parts of the teacher training, interactive parts of education - thus seminars and workshops, where knowledge sharing among colleagues happens, and by a variety of inspiring instructors.

**Key words:** pre-service teacher education, Czech Republic, sense of preparedness, novice teachers

I, the undersigned, declare that this dissertation is my original work, and has not been presented in fulfillment of other course requirements at any university.
Signature:

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### Chapter 1 – Introduction

Pre-service teacher education is important for teachers' professional development and teachers' effectiveness, and thereby strongly affects students' learning outcomes (Avalos, 2011; Brown et al., 2014; Darling-Hammond et al., 2005; Korthagen, 2011, 2011). Improving the preparedness of teachers has been a policy priority in numerous countries, despite various political and economic challenges such as insufficient budgets and high levels of teacher turnover and attrition (Darling-Hammond, 2017; Zuljan et al., 2011).

Diverse international organizations, for example, the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Bank, and the Organisation for Economic Co-operation and Development (OECD), play a vital role in addressing the quality of teachers. OECD's Teaching and Learning International Survey (TALIS) has become a prominent tool to assess different facets of the teaching profession (OECD, 2021b; Sorensen and Robertson, 2017). OECD's influential publication "Teachers matter" (2005) describes the significance of developing the teaching profession through better education to ensure sounder learning of students. Reforming pre-service teacher education has been considered a crucial element to adequately prepare teachers for their future work (OECD, 2017b).

Pre-service teacher education affects beginning teachers' attitudes and competences in terms of their sense of preparedness/readiness¹ (Allen, 2009; Boyd et al., 2009; Brown et al., 2014; Ingvarson et al., 2007). 48 countries participated in the newest TALIS from 2018. The Czech Republic, upon which the thesis focuses, is a relevant case study to further study teachers' sense of preparedness. Less than a third of Czech lower secondary teachers (including both novice and experienced teachers) in every measured field responded to feel either prepared or well-prepared to handle the specific field in their profession. In comparison:

 regarding "student behaviour and classroom management", 30 % of Czech teachers responded to feel prepared/well-prepared for this field, while the average of countries involved is 59.27% (OECD, n.d. [2018]).

<sup>&</sup>lt;sup>1</sup> I tend to use interchangeably terms readiness and preparedness. I use either readiness or preparedness, when a) respecting nuances of English b) referring to a particular piece of literature where one of the terms was used. The words are synonyms (Cambridge Dictionary (2021).

- in "Information and communication technologies (ICTs) for teaching", 27.7 % of Czech teachers responded to feel prepared/well-prepared for this field, while the average of countries involved is 48.2 %.
- regarding "Teaching in multicultural setting", 9.7% of Czech teachers responded to feel prepared/well-prepared, which is the second-lowest number of teachers feeling prepared for this area among the participating countries. The average is 30.8 %.
- Czech teachers expressed the lowest feeling of preparedness to teach pupils with special needs (only 18.8 %) among participating countries where an average in the sense of preparedness is 49.2%. (OECD, 2020, 2021a)

In every field mentioned above, Czech Republic was among the five countries where teachers expressed to be the least prepared in comparison to other participating countries. Teachers also stated that the respective field was not included in their formal studies. These results might be slightly misleading regarding the current pre-service teacher education in the Czech Republic, as the respondents in TALIS were both novice and experienced teachers. Notwithstanding critiques of instruments such as TALIS (Robertson and Dale, 2015) these alarmingly low perceptions of Czech teachers' abilities and an important role of teacher education in shaping those abilities, make it relevant to analyze the potential of pre-service teacher education in the Czech context with regards to novice teachers' sense of preparedness.

### 1.1 Contextual description of pre-service teacher education in the Czech Republic

This thesis focuses on secondary school teachers. The most common way of becoming qualified to teach at secondary schools in the Czech Republic is the attainment of a university master's degree in the field of teacher education. Most fields are currently accredited as a combination of a three-year bachelor's degree and a follow-up two-year master's program, where the curriculum of teacher training consists of subject training and professional-pedagogical training. The qualification can also be obtained after graduating from a non-teaching master's study field under the condition of a lifelong learning program (or an alternative) aimed at preparing teachers of general education programs of the required school level (EACEA, 2021).

With regards to the popularity of pre-service teacher education, in 2016, more than 33% of the respondents intending to enroll in pre-service teacher education at a university in the Czech Republic did not intend to teach at all, because many choose the studies as a path into higher education and a university degree rather than into the teaching profession. Furthermore, 26% claimed they would potentially enjoy teaching, but do not want to make a living from it. Hence, approximately more than half of applicants in teacher education do not intend to teach. Among students who do not even intend to enroll in teaching faculties, almost 20% of them would enjoy teaching but they are discouraged from considering teaching careers by various factors (mainly low salary, perceived difficulty of the teaching profession, conditions in schools, low prestige in society) (SCIO, 2016). Low interest in studying teacher education, and

becoming a teacher naturally results in a shortage of teachers. This is currently a problem in the Czech Republic where schools would need approximately 6000 more teachers – such a situation led the Ministry of Education to reduce the qualification requirements for beginning teachers in 2020 (ČT24, 2020). In 2021, the "Pedagogical Chamber" (Pedagogická komora) of Czech teachers initiated a vocal disagreement against addressing the shortage of teachers by replacing teachers with professionals without pedagogical education (Pedagogická komora, 2021). I argue that the voice of teachers should be considered when changing standards concerning teacher education and I reflect on this through my research.

Looking at the history of Czech teacher education, it has significantly changed since the 1990s after the end of the communist regime when the universities started to design preparatory teacher training using diverse approaches in contrast to a unified approach before. Thus nowadays, as teacher education has been deregulated, study programs vary from one teacher training institution to another. Notwithstanding the variety, teacher education programs at universities usually have a significant academic and subject-oriented component which might result in reduced space in practical preparation for teaching (Vašutová and Spilková, 2011). Furthermore, the so-called trend of "deprofessionalization" in the Czech Republic – mirroring global dynamics (Robertson, 2012) – has been observed in the last decades due to "deprofessionalization" of teacher training and pre-service teacher education standards, among which is visible inadequate admission process - thus not selecting future teachers based on characteristics relevant for the teaching profession but rather based on testing subject knowledge: "The change in admitting is a question of a system change in the professionalization of teacher training; it concerns the national system of qualifications and the professional standard for teachers" (Vašutová and Spilková, 2011, p. 203).

### 1.2 Purpose of the research

Considering previous research done by various scholars (Brown et al., 2014; Darling-Hammond et al., 2005; Ingvarson et al., 2007), the sense of teacher preparedness/readiness of novice teachers is an important aspect with regards to their effectiveness in the teaching profession. As already described above, the Czech Republic is in a complicated situation considering the low interest of potential students to enroll in teacher education as well as the perceived low sense of preparedness of Czech teachers in TALIS.

I would like to contribute to the research focusing on how teacher education programs shape teachers' sense of preparedness. Furthermore, I consider it important to discuss the improvement of teacher education with novice teachers and thus giving voice to them. The Czech context serves as a case study. I explore two different facets of teacher education programs. Firstly, I scrutinize the aspects that are crucial for novice teachers' readiness based on teachers' perspectives. The second facet, directly connected to the readiness of teachers, focuses on the characteristics of the specific teacher training designs and contents. Besides the teacher training design, I also include a governance component by

focusing on the admission process. Additionally, regarding the COVID-19 pandemic which significantly affected the previous school year, such research might contribute to the literature showing relevant upto-date implications.

To sum up, I strive to identify how initial teacher education affects beginning teachers' sense of preparedness. Thus, my main research question is:

# > How does pre-service teacher education shape the sense of preparedness of novice teachers?

The main research question entails two main concepts: sense of preparedness and pre-service teacher education potential to prepare future teachers. With regards to these concepts, I formulate five subquestions. The following chapter further explains these concepts.

A comparative case study approach is held between a regular program delivered by either an institution from a traditional university setting or an alternate-route initiative. This approach will allow me to investigate the differences. When analyzing findings, besides the Czech context, I consider the specific context of each teacher education program delivered by diverse institutions.

As this study has a character of a comparative case study, it is necessary to pose one more question:

➤ What differences are visible across diverse pre-service teacher education programs regarding shaping novice teachers' sense of preparedness?

This question represents an overarching analytical angle for the research questions. To respond to the main research question I employ a focused structured comparison (George and Bennett, 2005). The research has a qualitative character built on a constructivist research paradigm.

### 1.3 Structure of the thesis

In the next chapter, I describe the study's theoretical framework. Chapter Three explains the research design – choice of research approach, cases´ selection and their contextual description, data collection, data analysis, positionality, ethical considerations, and limitations of research. The findings of the study are described in the following chapter – they are divided into five comparison elements, and within-case & cross-case analyses. Ultimately, Chapter Five is devoted mainly to discussion and conclusion.

### Chapter 2 – Theoretical framework

In the following part, I discuss key concepts and theoretical underpinnings from literature which informed the study and shaped its research objectives. The main concepts crucial for the research are **pre-service teacher education potential** through its recommended design and content, and the **sense of teacher preparedness**.

### 2.1 Pre-service teacher education potential

Pre-service teacher education usually is the first step that future teachers take on their way to the teaching profession as a conscious decision to prepare for becoming a teacher. Thus, initial teacher education plays an important role in the professional development of every certified novice teacher. Darling-Hammond et al. (2005) claim that teacher preparation is significantly related to the teachers' effectiveness and quality – their findings showed that uncertified Teach for America<sup>2</sup> novice teachers is less effective in their profession than certified teachers. Also, findings from other studies investigating students or graduates of pre-service teacher education in terms of their perceptions of their preparedness show a significant effect on the sense of preparedness by pre-service teacher education (Brown et al., 2014; Ingvarson et al., 2007). Initial teacher education's impact on novice teachers is thus very noticeable. Regarding pre-service teacher education potential, its quality is a central dimension.

A variety of sources endorse a very similar approach towards pre-service teacher education potential, and thus quality. They emphasize that teacher education is crucial for teacher quality. Good pre-service teacher education quality, and thus the adequate quality of teachers, ought to be ensured by establishing sound professional standards (Caena, 2014; Darling-Hammond, 2017; Suchánková, 2007). Researchers identified a correlation between countries with high-quality arrangements in teacher education (for instance in Chinese Taipei or Singapore) and better achievements of students, whereas the opposite has been found in countries with weaker quality assurance arrangements (e.g. Georgia and Chile) (Ingvarson and Rowley, 2017). A sound example of a country with high standards for teacher education as well as the quality of teachers is Finland (Sahlberg, 2007). Finland has become renowned in the

<sup>&</sup>lt;sup>2</sup> Teach for America – non-profit organization recruiting college graduates to commit to teaching for a certain period, it provides an alternative route to pre-service teacher education (Teach for America, 2021).

education field for its remarkable results of its 15-years old students in PISA testing. With regards to PISA, another recent research showed that achievement in this international assessment is partly determined by the quality of teachers in the country (Özer, 2020). Compelling evidence coming from various and specific cases shows the importance of high standards in pre-service teacher education, as these affect teacher effectiveness.

Furthermore, standards in education quality are often defined by international actors and the education system quality is frequently evaluated by performance in international assessments. International organizations thus tend to advocate the "best practices" in education. OECD is a vocal actor (Auld and Morris, 2016; Sorensen and Robertson, 2017). Hence, for this research, I consider the OECD Teacher Education Pathway model promoted through OECD Initial Teacher Preparation study to explore what high-quality pre-service teacher education means (OECD, 2017a). The conceptual framework OECD Teacher Education Pathway regarding the quality of teacher education systems consists of 6 themes where 4 relate to initial pre-service teacher education, namely: "a) attracting candidates into initial teacher education (ITE) programs b) selecting the most suitable candidates into ITE programs c) equipping prospective teachers with what they need to know and do d) delivering initial ITE programs effectively" (OECD, 2017b, p. 4). These four criteria form the core dimensions through which I look at pre-service teacher education quality. I consider the first two criteria – attracting candidates into teacher education programs and selecting candidates – as the 'admission process'. The third and fourth criteria – adequately equipping future teachers as well as delivering the teacher training effectively – will be considered as 'effectiveness of pre-service teacher education'.

### 2.1.1 Admission process

Attracting candidates who are suitable to become prospective teachers and thus will contribute to the teacher quality is crucial (OECD, 2017a). Numerous scholars suggest that as a basis for quality initial teacher education, it is necessary to scrutinize selecting potential candidates (Barber and Mourshed, 2007; Boyd et al., 2009; Darling-Hammond, 2017; Ingvarson and Rowley, 2017). And thus, research related to the admission process to the teacher education institution is relevant, as the admission is the first official step that allows the applicants to begin their way to become certified teachers. A study that scrutinized both traditional and alternate-route pre-service teacher education claimed that "when trying to identify what aspects of the preparation contribute to teacher effectiveness in the classroom, we do need to control for differences in teachers' entering characteristics" (Boyd et al., 2009, p. 433).

Countries that achieve high results in PISA were studied with regards to the recruitment of future teachers and it was found that "the top-performing school systems we studied recruit their teachers from the top third of each cohort that graduate from their school systems; the top 5% in South Korea, the top 10% in Finland, the top 30% in Singapore" (Barber and Mourshed, 2007, p. 19). For example, in Finland entry requirements to the universities are high and complex, teacher education combines research and practical

components, and last but not least, teaching is a very appealing profession – hence the universities tend to attract and thus select high-quality candidates (Darling-Hammond, 2017; Sahlberg, 2007). It has been found that among the high-quality education systems, a high level of academic achievement (e.g. high levels of numeracy and literacy) is usually among the basic important criteria in the admission process. Nonetheless, other criteria, potentially more relevant with regards to the teaching profession, such as communication skills and motivation for teaching are crucial characteristics when selecting future teachers (Barber and Mourshed, 2007; Ingvarson and Rowley, 2017). To select suitable high-quality candidates that will be capable of teaching in complex practice, Heinz (2013) claims the importance of "broadening the selection criteria to include some indicators of personal qualities, attitudes, cultural responsivity and commitment to the teaching career" (Heinz, 2013, p. 112).

Selecting suitable candidates for future teachers appears to be a very relevant criterion when considering the effectiveness of pre-service teacher education (Boyd et al., 2009). Numerous faculties of education in the Czech Republic conduct an admission process under which future students are admitted to teaching programs based on solely subject knowledge tests while motivation, personality, and other important aspects of the teaching profession such as "pedagogical talent" are not taken into account. Consequently, entry requirements of this nature seem to contribute to the deprofessionalization of the teaching profession (Vašutová and Spilková, 2011).

### 2.1.2 Pre-service teacher education effectiveness

The literature discusses a variety of factors when analyzing what is crucial and effective in initial teacher education. Darling-Hammond (2006), expresses the inherent complexity of designing teacher education. Furthermore, the importance of practice during pre-service teacher education is considered very important, notwithstanding, it is necessary to link the practice to a "strong core curriculum" to overcome the gap between theory and practice (Darling-Hammond, 2006). An approach of learning theory first and conducting practice later has been in many countries "traditional". Nonetheless, in various teacher education programs it has been replaced by a "practice first, theory later" approach (Korthagen, 2011). Korthagen (2011) deduced that approach of focusing at first solely on practice is inadequate, as it is important to connect theory with practice adequately. Furthermore, reflection as a part of the teaching-learning process as well as the ability of self-reflection plays a vital role in the effectiveness of teacher education (Korthagen, 2016). Regarding the importance of practice, considering the German teacher preparation system, experiences from the school environment seem to be decisive with regards to adequate "general pedagogical knowledge" of future teachers. The research found that students significantly enhanced their pedagogical knowledge after the practical component of the study which followed the theoretical preparation (König, 2013).

One study has been particularly inspirational regarding this research as it emphasized the potential of comparison between different teacher education programs – both alternate and traditional – through

discovering specific characteristics and differences of the programs. The study found that for diverse routes to education, learning practical knowledge, supervised student teaching practice, and studying local school curricula were considered one of the crucial parts of program design regarding producing higher student achievement (Boyd et al., 2009). Nonetheless, there have been different results when comparing certified teachers who received education in either alternate-route or traditional institutions (mainly universities) in various studies depending on the focus of the study (Boyd et al., 2009; Lowery et al., 2012; Uriegas et al., 2014).

Clinical practice is considered very relevant. The concept of clinical practice in teacher training is based on reflected practice implemented in a clinical school in the context of cooperation between schools and universities & students (of pedagogy) and teachers/mentors/tutors (Darling-Hammond, 2014; Spilková et al., 2015). Regarding specifically inclusive settings, teachers declared to feel prepared better to teach students with special needs if they received practical training (not necessarily in formal education) regarding teaching students with disabilities (Kahn and Lewis, 2014). Novice teachers in certain research claimed that during their first year of teaching they appreciated the practical part of their studies over the theory and that it is necessary to acquire competences regarding all facets of teaching, not only the content of the subjects (Allen, 2009). There is evidence that teachers feel prepared to teach during their first year of teaching when they have been given a deep understanding of the content knowledge they are expected to teach and methods regarding teaching and linking specific content (Ingvarson et al., 2007).

Furthermore, an effective learning environment emerges as an important component of the initial teacher preparation program. If the learning environment acknowledges the importance of engagement of students and consequently students adhere to effective learning principles, pre-service teacher education can be improved (Conner and Sliwka, 2014). The importance of an effective learning environment has been emphasized with regards to peer learning and tutoring (Schleicher, 2011). Schleicher (2011) also underlined the importance of understanding teachers' perspectives, when improving teacher education. A concept of "effective learning environment" as a factor contributing to effective teacher preparation has not been extensively explored. Despite this, I see it as a sound overarching concept that might help to simplify the complexity of a variety of factors present in an efficacious initial teacher preparation program.

### 2.2 Sense of preparedness

Generally, those teachers who were satisfied with the practical part of their studies report higher levels of teacher readiness (Mohamed et al., 2016). Nonetheless, there is a variety of competences that appear to be important for the sense of readiness. Competences seem to be more frequently emphasized regarding the preparedness than identity or attitudes of a "prepared teacher". Teacher readiness/preparedness can be understood through the international teacher competences framework that consists of content knowledge, skills, and attitudes/behaviors (Mohamed et al., 2016). Understanding that not solely

competencies can grasp the sense of preparedness, it might be important to focus also on the identity of teachers (Korthagen, 2004). Especially considering that competence is a synonym for "ability" or "skill", we might need to ask "Who is a prepared teacher?" besides the question "What does a prepared teacher need to know?".

### 2.2.1 Competences of a prepared teacher

Diverse lists or group of key competences regarding teacher preparedness have been formed by international institutions (e.g. TALIS OECD, European Commission) or by diverse scholars, frequently with a focus on the importance of a specific set of competences – e.g., digital (Røkenes and Krumsvik, 2016), intercultural (Cushner and Mahon, 2009; Dervin et al., 2019), subject knowledge (Mitchell and Lambert, 2015), classroom management (O'Neill and Stephenson, 2012), or inclusive (Navarro et al., 2016).

Evaluating various teacher key competences' frameworks, it seems that a very comprehensive list of teacher competences has been framed with an international perspective by the scholars Mohamed, Valcke, and De Wever (2016) with the use of the OECD, UNESCO, European Commission documents, relevant academic literature basis, and consequently scrutinized through a quantitative analysis. The list of international teacher competences includes: "1. Knowledge of curriculum and subject matter, 2. Instructional planning and strategies, 3. Effective use of teaching materials and technologies in facilitating students' learning, 4. Commitment to promoting the learning of all students, 5. Managing students and learning environment, 6. Knowledge of diverse students, including special needs, and how they learn, 7. Adapt teaching to respond to the strengths and needs of all pupils, 8. Effective collaboration with colleagues and partnering with parents, social services and the community, 9. Professional growth and development, 10. Willingness to try new ideas and strategies, 11. Exercising personal integrity and legal responsibilities." (Mohamed et al., 2016, p. 7). This competence framework belongs to the core aspects of my data analysis as it informed this research to a big extent with regards to the creation of data collection instruments (semi-structured interviews and online questionnaires). The list aligns with the recommendations for teacher preparation published by OECD (Schleicher, 2011) and European Commission (Caena, 2014).

### 2.2.2 Identity of a prepared teacher

Korthagen claims that solely competencies do not define a good nor a prepared teacher. He emphasizes that besides competencies, there are teacher beliefs, identity, and mission (why the person decided to become a teacher?) which are crucial. He examines the importance of teacher identity regarding teacher education (Korthagen, 2004). This connects to the above-described importance of the admission process and thus the potential of future teacher candidates to develop an authentic teacher identity. Learning how to become a teacher, which is often unconscious, includes motivational, emotional, and cognitive levels

(Korthagen, 2016). Pravdová states that one of the important conditions to become a successful teacher is a teacher's identity in a form of a "positive professional self-concept" and claims the importance of nurturing such an identity during initial teacher education (Pravdová, 2013). An example of a paradigm that can form a teacher's identity positively is the concept of academic optimism. Academic optimism can be considered an attitude, which is built on 3 pillars – a sense of efficacy, trust in students and parents, and academic emphasis. Research indicated that being academically optimistic brings positives for teachers in terms of resilience regarding potential problems in teaching while supporting students effectively (Beard et al., 2010; Woolfolk Hoy, 2012). Recent research in the Czech Republic showed a positive correlation between the academic optimism of teachers and the achievement of the students (Straková et al., 2021). Therefore, besides competences, it seems important to focus on how teacher identity and motivation are fostered during pre-service teacher education, which is also significant regarding teacher quality and ability to improve students' achievements.

In conclusion, the literature review helped me to identify the main priorities in research relevant to initial teacher education as well as concepts essential for the analysis and also for the creation of questionnaires (semi-structured interview and structured online questionnaire). Thus, the main concepts that help me to explore this topic are "sense of preparedness" – including competences and teacher identity – and "preservice teacher education" understood through the concepts of the effectiveness of initial teacher education and the role of the admission process.

### Chapter 3 – Research Design and Methodological Framework

As I focus on the perspectives of novice teachers rooted in their experiences of a particular type of preservice teacher education, I chose the qualitative approach to research. Furthermore, I consider my research paradigm related to constructivism, as all the data collected and analyzed come from the questionnaires or interviews with teachers, the questions explored are broad to leave space for the participants to construct the meaning and also, the main source of knowledge is based on individual teachers' experiences and their points of view (Creswell and Poth, 2016). This part of the thesis explains the core elements of the research design: a comparative approach, case selection and the contextual characteristics, data collection methods, data analysis, ethical principles, and limitations.

### 3.1 Research questions

As a reminder, this study explores the main research question:

## > How does pre-service teacher education shape the sense of preparedness of novice teachers?

There are two main concepts: At first, novice teachers' sense of preparedness which is related to prepared teacher definition and subjective preparedness of novice teachers.

*Table 1 – Summary of Concepts, Comparison elements, and Sub-questions* 

Main concepts arising from RQ	Comparison elements	Sub-questions
Sense of	Prepared teacher definition	What makes for a prepared teacher according to novice teachers' perspectives?
preparedness	Subjective preparedness of novice teachers	How prepared do the novice teachers feel after finishing preservice teacher education?
Pre-service	Beneficial aspects of pre-service teacher education	Which aspects of teacher education help future teachers to prepare for their profession?
teacher education potential	Pre-service teacher education shortcomings	Which aspects of teacher education present limitations for future teachers to prepare for their profession?
	Role of admission process	What is an adequate type of entrance exam for the selection of future teachers?

Secondly, pre-service teacher education potential, and its effectiveness in connection with the perceived benefits, shortcomings, and the role of the admission process. To respond to the main research question, I formulated 5 sub-questions as described in Table 1.

As this study has a character of a comparative case study, one more research question is posed:

➤ What differences are visible across diverse pre-service teacher education programs regarding shaping novice teachers' sense of preparedness?

This question presents an overarching analytical angle for the research questions. The two main concepts –novice teachers' sense of preparedness and pre-service teacher education potential – are meaningful moreover with regards to the comparative nature of this study as they help to establish significant functional equivalents, which are comparable among each other (Esser and Vliegenthart, 2017).

### 3.2 Comparative research approach

Considering a variety of teacher education features affecting teachers' preparedness, it is important to scrutinize the effectiveness of these features both individually and as a whole (Mohamed et al., 2016). A comparative character provides an opportunity to consider specifics of different types of pre-service teacher education and hence to explore a phenomenon of shaping a sense of preparedness in novice teachers in greater detail while describing and finding links between apparent similarities or differences across the cases (Fairbrother, 2005). Furthermore, given that different characteristics of teacher education can have varying effects on student teachers' readiness for their profession, it is important to consider the efficiency of these characteristics both individually, and as a whole, to complement the learning process.

In terms of research design, I conducted comparative qualitative case study research and used an approach of focused structured comparison by George and Bennett (2005). The method is composed of the "structure", which consists in writing "general questions that reflect the research objective and that these questions are asked of each case under study to guide and standardize data collection, thereby making systematic comparison and cumulation of the findings of the cases possible" (George and Bennett, 2005, p. 58). This comparative approach is also "focused" because it focuses only on specific features of the scrutinized cases (George and Bennett, 2005). Esser and Vliegenthart further claim that "For case studies to contribute to cumulative development of knowledge and theory they must all explore the same phenomenon, pursue the same research goal, adopt equivalent research strategies, ask the same set of standardized questions, and select the same theoretical focus and the same set of variables." (Esser and Vliegenthart, 2017, p. 5).

Regarding the structure of this comparison, I identified the phenomenon (novice teachers' preparedness shaped by pre-service teacher education), 5 sub-questions (as seen in the table 1), and comparison elements to cumulate the findings separately for each case but also comparatively among each other.

Comparable elements are established to be commensurable among each other while reducing the complexity of the topic in order to answer the research question (Esser and Vliegenthart, 2017).

### 3.3 Case selection and contextual characteristics

This section explains the case selection and summarizes seven criteria that have been chosen as important with regards to the context of pre-service teacher education held in three diverse institutions in the Czech Republic.

#### 3.3.1 Selection of institutions

For case selection, I decided to employ a strategy of choosing two similar cases (pre-service teacher education in a traditional university setting), and the third case noticeably different (an alternative preservice teacher education fostered by a non-profit organization) (George and Bennet, 2005). Thus, two scrutinized institutions provide academically-oriented university programs. Institution 1 and Institution 2 then represent academically-oriented foundations providing pre-service teacher education leading to becoming a qualified teacher through a master's program at renowned public universities. On the other hand, Institution 3 provides a pre-service teacher education accredited as a form of life-long learning through cooperation between a non-profit organization and a private university. It is an alternate-route initiative that is considered more professionally than academically oriented.

I decided for such a case selection to grasp diverse types of pre-service teacher education in the Czech Republic and at the same time focus both on alternate-route and traditional university setting teacher training, as scrutinized in different studies in the past (Boyd et al., 2009; Lowery et al., 2012; Uriegas et al., 2014). The study has a qualitative character, therefore I decided to scrutinize solely 3 institutions to provide in-depth analysis considering the context of each institution.

### 3.3.2 Contextual Characteristics

Contextual descriptions are crucial for understanding profoundly the case studies and interpreting the results of comparative analysis (Esser and Vliegenthart, 2017). Thus, the differences in the institutions' context providing diverse pre-service teacher education programs are crucial. The basis for the contextual set of elements can be found in the theoretical framework. The first three criteria – Type of Institution, Institution History & Vision of Institution – are seen as important for the general background of each case study and thus understanding profoundly motivations and approach of each institution in educating future teachers. The criteria Structure of Studies, Admission Process, Curriculum, and Teaching Practice are considered relevant with regards to how teacher education is formed at each institution and thus what the respondents in this research underwent during their pre-service teacher education. All the information about teacher education at selected institutions is relevant to the period when the respondents of this

research studied their pre-service teacher education program. The details of the selected institutions were gained mainly from the semi-structured interviews and online questionnaires and the information has been verified through the official information available online. Notwithstanding, the official titles and sources relevant to the institutions have been removed to reassure full anonymization and to respect confidentiality to the participants (Thomson et al., 2005).

Table 2 – Contextual Elements of Institutions

Contextual elements	Institution 1	<u>Institution 2</u>	<u>Institution 3</u>
1) Type of Institution	Institution 1 is a faculty of education at the university. It is oriented mainly on pedagogy and teacher training but also emphasizes research and academic approach.	This institution (Faculty of Education) focuses mainly on professional teacher development. Its nature is also research-oriented.	A non-profit organization striving to innovate Czech education. The organization launched diverse educational programs, it is accredited as a teacher education institution through cooperation with a private university.
2) Institution History	Several institutional changes and a foundation of both faculties after V been important teacher education pr	Institution 3 was created with a focus on social entrepreneurship and innovations in education relatively recently. The teacher training has been accredited by the Ministry of Education.	
3) Vision of Institution	The institution presents 3 main values: open access to education; partnership - with various institutions & between students and teachers; social responsibility also connected to sustainable development. An emphasis is placed on the professionally-oriented and academic training of teachers.	A priority is teachers' professional development as a part of preservice teacher education and their subsequent professional growth. The emphasis is set on quality in teaching and pedagogical work as well as high standards in scientific activities. It is also focused on the development of other pedagogical staff.	The vision of Institution 3 is to contribute to the improvement of the education system in the Czech Republic as it focuses on developing innovative programs for teachers and principals. The organization claims that improvement in children's education and development is at the center of theirs mission.
4) Structure of Studies	The structure of studies is typical for a university. Respondents who studied at the institutions are certified teachers at secondary schools (lower and upper level) after graduating from the MA program.  Pre-service teacher master's programs at both institutions are equal to 120 credits (ECTS) in 2 years of full-time studying. An approximate amount of study hours for 1 ECTS usually equals from 20 to 30 hours - this includes an assumed workload overall, not only the contact hours (e.g. hours spent at seminars) (Atack, 2021). Offered courses/lectures are divided between 1. compulsory courses 2. compulsory-optional courses (list of courses related to the study field, students must select some) 3. optional courses (offered by the university, not necessarily relevant to the studies).  Furthermore, a thesis – an academic written task devoted to research – is an essential part of each master's program.		A two-year-long program dedicated to university graduates from mainly non-pedagogical fields who need skills and knowledge to teach subjects in lower and upper secondary schools related to their previous studies. It is accredited as a part of lifelong learning education as a part-time form of study. The program of Institution 3 consists of compulsory parts (student participation must be at least 75%). Participation in the optional parts (e.g. excursions abroad) is voluntary. An equivalent to a thesis is a written task based on the teaching practice, theoretical knowledge learned in the program and literature.
5) Admission Process	The admission process at the BA level consists of testing verbal, numerical, analytical, and critical thinking.  At the MA level, there is a written exam of pedagogy and psychology.	BA programs (different versions): a) no entrance examination if above-standard results at high school graduation exam b) testing verbal, numerical, analytical, and critical thinking c) Written exam from the subject field MA programs: test divided into two parts	The evaluators consider the applicants' intentions to teach at least part-time in secondary schools.  The admission process is divided into two rounds:  1. A motivational essay and a CV.  2. Presenting teaching in practice in the class based on a presubmitted assignment —

, ,	observed by
	erward, an
psychology. interview with the e	
The curriculum is	
A curriculum differs to some every student (ap subject didactics).	art from the
A curriculum differs to some extent regarding the respondents' subject didactics). Four theoretical	parts of the
specializations. It consists of a program devoted to	
"Common base" (Pedagogical-	levelopment of
psychological preparation) - A diversified curriculum that teachers	
lectures and seminars compulsory	and the field of
for all the teaching programs.	ips conditions for
(compulsory compulsory teaching	and learning
optional or optional) there is a common base redagogical subject di	
various offer of courses in same subjects compulsory for the	
Common base (Alternative and programs, related to teaching) is covered in 270 ho	
education etc.) lectures & seminars (e.g. General workshore /courses	
didactics and school pedagogy).	e role of the
Compulsory courses of didactics  Mainly compulsory courses and, but also compulsory-optional	
differ depending on the subject courses related to pedagogical • Our er	notions and
specialization, usually, they are in psychological preparation – a relationsh	ip signals and ets on students
Curriculum courses range from 3 to 5 diverse offer of courses (e.g.	as on students
compulsory courses depending on Motivation in School).  Each part is delivery	ed to students
the specialization.  Compulsory courses of didactics through "weekend"	
Other mandatory courses are differ depending on the subject times each year) and the subject times each year and the subject times each year) and the subject times each year and year and year and yea	
specialization, usually, they are in weekend elected in	ippening twice
knowledge and research and are a to 6 compulsory courses (per All parts of the pros	ram are taught
combination of lectures and specialization in teaching). in a form of a semi	
seminars. nonetheless some	
The majority of the respondents  Other mandatory courses usually "weekend blocks" if form of a lecture.	night be in the
had an obligation during the study had a soligation form of a lecture.	
to fulfill internationalization mainly lectures and seminars: Reflective seminars	
component – study abroad or an and take place ever	
teach in a foreign language	
optional courses often include didactics & subject knowledge &	
Moreover, compulsory-optional practice (e.g. assistance practice).	
courses consist of mainly subject etc.). Furthermore	
knowledge, languages specialized for teachers or the specialization, diaries are emph important learning	
and didactics. Institution 3 program	
are supposed to w	
nearly on daily basi	s.
Possirements regarding teaching A various type of practices with Requirements regarding teaching	
Requirements regarding teaching practice are identical for all the different requirements depending practice are identical to the practice are identical practice are identical to the practical form of the practical form	
students of MA programs at the Respondents, who studied also at form of lessons tau	
faculty. All the respondents in this BA programs at the faculty students) is many	latory in the
research studied also BA programs mentioned in interviews a length of 120 hours	during 2 years-
at the faculty and they mentioned in interviews teaching assistant possibility of teaching assistant possibility of teaching assistant	
practice or tutoring practice.	
Teaching Practice at bachelor as well as tutoring practice or excursions.  "Classic teaching practice" at the tutoring practice or excursions.  "Classic teaching practice" at the MA level is divided between	
teaching at lower and upper and reflection of teaching at lower and upper	ching together
Teaching practice at the MA level secondary schools. This type of with a teacher guide	<b>).</b>
and the 3rd semester Classroom practice usually happens The total amount	of practice in
observations as well as other Continuously in a snorter period school in 2 years is 3	
activities relevant for teachers within one semester (e.g. one involves direct tea	ching practice
(e.g. preparation for teaching, neip) the respondents) and can be	
students with special needs etc.) combined with reflection preparation for less	
make part of these teaching seminars, classroom observation and another student	
practices. "Real" teaching practice practice, or didactics of the subject mentors visit students	

(lessons taught directly b students) are included.

#### An overview of practice:

180 hours spent directly in schools
- approximate number of hours
taught by students -> minimum 68
hours (tandem teaching also
included) + classroom
observations (assumably from 10
to 20 hours each semester) +
teaching assistance practice (not
defined a specific number of
hours) + other assignments in
schools

(the specifics depend on the specialization).

Pedagogical-psychological practice is also mandatory as a part of "Common base". Classroom observations might take place in diverse types of schools and are an addition to teaching practice. However, the specific form of practice depends on the specialization.

#### An overview of practice:

the approximate number of hours taught by students -> minimum 24 hours - maximum 48 hours -> including reflections + classroom observations (minimum 10 hours, usually more) teaching + assistance practice (approximately 20 hours at school) + pedagogicalpractice psychological with pedagogical and psychological reflection

teacher guides, they try to provide another perspective and help with finding new ways in teaching. Tandem teaching, classroom observations, teaching assistance, joint reflection within the unit, direct work with children besides teaching, and observation of school life generally are also included. Additionally, there are 50 hours of excursions (5 full-day excursions) in Czech schools and optionally a possibility of school excursions abroad.

#### An overview of practice:

330 hours spent directly in school – minimum of teaching practice (taught directly by students) -> 120 hours in 2 years + classroom observations + teaching assistance + other tasks related to teaching and working with children + school life observation. Additionally, at least 50 hours of school excursions.

### 3.4 Data collection

The data collection was conducted in the Czech Republic from November 2020 to January 2021 and consisted of semi-structured interviews and online structured questionnaires.

### 3.4.1 Data collection methods

Semi-structured interviews are the main data collection method. The constructivist approach targets the description of a particular phenomenon based on scrutinizing the data gained from the individuals experiencing a certain situation from their perspective and thus constructing the reality (Creswell and Poth, 2016). Regarding a variety of factors important for pre-service teacher education, I see the importance of an unbiased and open approach in this research. As this is qualitative research based on semi-structured interviews, I selected semi-structured interviews to ask my respondents (novice teachers) open questions regarding what they consider beneficial about their pre-service teacher education with regards to their sense of preparedness.

Semi-structured interviews were mainly conducted online through a video call due to safety reasons during the COVID-19 pandemic. An interview took on average 45-50 minutes. Online structured questionnaires were conducted through an electronic platform afterward connected with the responses from semi-structured interviews. Filling in the online questionnaire required approximately 15 minutes and most of the respondents completed questionnaires before the interview took place. Questions both in an interview and online questionnaire were based on the literature review and knowledge considered important both by scholars and international organizations (mainly OECD TALIS). The covid-19-crisis aspects have also been taken into consideration as many respondents were finishing their studies during

the pandemic. A sample of the semi-structured interview can be found in appendix 7.2, whereas a template for the online questionnaire is in appendix 7.3.

### 3.4.2 Sampling

Sampling in semi-structured interviews and online structured questionnaires (where the respondents were the same for each data collection instrument) was purposive (Sharma, 2017). It also involved features of self-selection sampling, as some respondents decided to participate voluntarily based on the presented announcement (for example, Institution 3 let me present my research at their event for alumni). Snowball sampling was also used as some respondents recommended other respondents.

The purposive sampling was linked to the following criteria for respondents: 1. finishing their active studies (either at Institution 3 or MA program at the faculty) at one of the three selected institutions either in 2019 or 2020, 2. teaching actively at a regular secondary school<sup>3</sup> for not more than 5 years. Fulfilling these two criteria generated a group of "novice/beginning teachers"<sup>4</sup>. A detailed list of respondents respecting confidentiality can be seen in appendix 7.1. Together, there were 15 respondents (4, 5, and 6 from each selected institution, everyone was interviewed once and filled in the online questionnaire also once), which is considered adequate for qualitative research focusing on an in-depth understanding of the phenomenon (Dworkin, 2012).

### 3.5 Data Analysis

I adopted a constructivist research paradigm with a narrative perspective guided by a thematic approach as I explore themes narrated by the respondents. I strive to understand a subjectively constructed reality of pre-service teacher education and its features that enhance a sense of preparedness (which is a very subjective concept as the topic is the "sense" of preparedness, not a measurable preparedness). I focus on novice teachers' perspectives also separately with regards to each selected case.

Data Analysis of semi-structured interviews was conducted as a combination of deductive and inductive coding. All the interviews were conducted in Czech and thus also transcribed and coded in Czech, but at the final stage of coding, all the codes were translated to English. Initially, I used the software MAXQDA and at later stages MS Excel. With regards to the analysis, at first, I identified a set of categories from the interview guide (deductive coding) (Rädiker and Kuckartz, 2020), which was based on the theoretical framework. At the same time, I focused on discovering possible new codes emerging from the data (inductive coding) (Miles et al., 2014) and firstly assigned them to the category "other", until I identified a suitable category for those codes or discarded them if not significant. This was the "basic coding",

<sup>&</sup>lt;sup>3</sup> By "regular" secondary school it is meant for instance that I do not count as "teaching actively" tutoring children or teaching adults in language schools, etc.

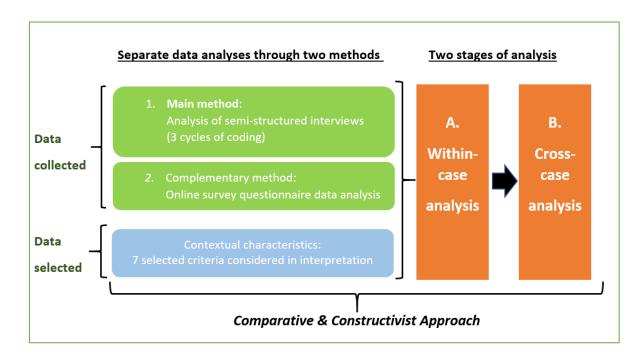
<sup>&</sup>lt;sup>4</sup> Novice teachers term - as for example defined in a study by Lacireno-Paquet et al. (2012).

which was followed by the "fine coding" where I reread codes and re-coded the information until all the codes could be further divided from categories to more precise subcategories (Rädiker and Kuckartz, 2020). At the fine coding, which was fully inductive (thus without a pre-defined set of codes expected), numerous new codes in every category emerged. The third stage of coding consisted of further analysis of subcategories, which were then formed into pre-defined comparable groups (see Table 1) (Miles et al., 2014). These were used afterward as comparison elements for a within-case and cross-case focused structured comparison.

A complementary research method employed is an online survey questionnaire. The questionnaire was completed by the same respondents who participated in the interview, as occasionally online questionnaires are used to complement the results from interviews, although this approach might cause challenges in the data analysis (Harris and Brown, 2010). I omitted the quantitative analysis which would be misleading with such a small number of participants (Delice, 2010). Instead, I decided to suit an unconventional approach, as sometimes unconventional methods are common when analyzing data in case studies (Bhattacherjee, 2012). Hence, online questionnaires are complementary to interviews and serve to a) observe phenomenon by the same participants from different points of view (triangulation) – it is the purpose mainly of the Likert Scale questions and therefore, I received more structured responses b) receive more reliable information through open questions regarding the contextual characteristics part, and thus help me to understand better the context of specific pre-service teacher education programs. I chose this approach because the information gained solely from semi-structured interviews might be somehow biased based on the way the interviewer asked the question (e.g. tone, formulation), or the interviewer's background (e.g. sex, age) (Wilson, 2014). Such factors might change the way an interviewee responds but this does not occur in the online questionnaire. Hence, I use the online questionnaires as an additional method, but consider only the information which is relevant based on the coded information from the semi-structured interviews (see 3.7 for more details).

Under the umbrella of focused structured comparison and constructivist approach emphasizing the perspectives of novice teachers, I conducted within-case and cross-case analysis (Bhattacherjee, 2012; Ponelis, 2015). With regards to each comparison element (see Table 1), I analyzed the findings "within-case" – thus within each institution, I described and tried to explain the findings in-depth with the consideration of the contextual characteristics (Miles et al., 2014). Consequently, I compared results "cross-case", which was possible only after deriving the findings from the within-case analysis. In cross-case analysis, I adopted this approach of focusing on similar or controversial coded information – thus, "streams that are similar or identical across cases, and that differ in some consistent way from other streams" (Miles et al., 2014, p. 220) – thus, these streams were extracted and thematically interpreted under the "comparison elements". At this stage, I looked also at the questionnaire Likert scale questions and additionally compared the findings.

Figure 1 – Data Analysis Plan



### 3.6 Ethics & Positionality

Ethical principles in research are extremely important to ensure, among other things, that the research process does not negatively affect interviewed persons (Bhattacherjee, 2012; Cascio and Racine, 2018; Průcha and Švaříček, 2009). Concerning data collection, voluntary participation and respect of the respondents are a must. Hence to confirm this officially, the "Informed Consent" was signed (see in the appendix), describing their right to withdraw, the specific use of the data collected, and importantly, a promise of confidentiality – thus a complete anonymizing of the data. The importance of confidentiality and anonymity is also considered now, in the process of publishing and potentially disseminating the thesis. Hence, I claim that I strive to avoid all kinds of unethical behavior in terms of misrepresenting data while highly respecting the principle of confidentiality. Concerning this, I decided to anonymize the institutions, thus not providing the names of the institutions. Nonetheless, as I describe the contexts of each institution, which is important for comparative case studies (Esser and Vliegenthart, 2017), the information provided about pre-service teacher education might help to recognize the specific institution. The difficulty in anonymizing the identity of the researched site is common and often challenging in case studies (Langley and Royer, 2006). Therefore, the confidentiality of the respondents is reassured also by providing the information about the participants in the appendix in a very confidential manner, not revealing characteristics such as names or age, and avoiding connection of other specific characteristics.

The positionality of a researcher is also a crucial ethical consideration that requires attention during the research process (Hopkins, 2007). I have experience with diverse kinds of teaching - foreign language teaching, teaching volunteering in diverse countries, tutoring disadvantaged children, etc. However, I

have never received official teacher training at a university nor an equivalent. Notwithstanding, I believe that my experiences with teaching help me to understand the respondents better to some extent but there are certain limitations of my understanding. Also, I am very familiar with the traditional university setting in the Czech Republic as I graduated from a BA program at the Czech public university. Nonetheless, my local fieldwork advisor is a person from Institution 3, which helped me to have better access to non-academic institution's background from another than traditional perspective (which I know personally as a former student of the Czech university). Moreover, currently, I am a student of a European innovative MA program and have experience with work in the field of innovations. This could potentially cause my alignment towards more alternative/innovative solutions and it probably affected my research focus. Nonetheless, I am aware of my positionality and thus strive to remain neutral and reflect on my potential biases at all stages of research.

### 3.7 Limitations

Probably, the biggest limitation of this research was the aspect of the covid-19 pandemic, due to which almost all the semi-structured interviews had to be online, which implies teachers probably felt also more exhausted. The online semi-structured interviews however resulted in a successful reconfiguration. Moreover, I was not able to conduct observations of pre-service teacher education institutions, which would have been an asset to the deeper understanding of contextual characteristics. I also experienced difficulties regarding access to respondents. Initially, I did not plan to use "snowball sampling", but it appeared to be the most efficient solution. I planned to involve respondents who finished the studies in 2019 but due to the lack of respondents, I decided to enlarge the studied group to those who finished studying in 2020. The use of online questionnaires could also be too ambitious, as the constructivist (and thus subjective) research approach of this study did not provide space to use the full potential of this data collection tool. Although I see a certain value in the online questionnaires which provided more details and precision to the subjective semi-structured interviews, I realized that I did not fully scrutinize its potential. The study is based on novice teachers' perspectives gained from a relatively small sampling – 15 semi-structured interviews and structured online questionnaires, thus the results are subjective and qualitative. Hence, the findings of the study might be considered when striving to understand the needs of novice teachers for developing a sense of preparedness related to pre-service teacher education.

### Chapter 4 – Findings

The findings are presented in line with the main theoretical concepts arising from the main research question (*How does pre-service teacher education shape the sense of preparedness of novice teachers?*). These concepts –Sense of Preparedness and Pre-service Teacher Education Potential – are further divided into five comparison elements (see Table 1). The elements have been used as an outline in the comparative analysis of the data gained from the combination of semi-structured interviews and online questionnaires. Five sub-questions are linked to the five comparison elements and my exploration of these questions leads to the response to the main research question.

All findings relevant to each concept are thus broken into comparison elements which are further described at first "within-case" (considering respondents representing one institution). Consequently, cross-case analysis is described, and sub-questions are answered. The details relevant to the analysis of each concept and comparison element can be found in appendices 7.5 and 7.6.

### 4.1 Sense of Preparedness

With regards to the concept "Sense of Preparedness", through the analysis I identified two comparison elements (as visible in Table 1):

- a) Prepared teacher definition
- b) Subjective preparedness of novice teachers

### 4.1.1 Prepared teacher definition

To discover the interviewees' personal definition of a prepared teacher, I focused on the competences and type of identity that the interviewees expressed as important for a well-prepared teacher. Teacher identity and set of competences are also clearly described in Chapter 2. Scrutinizing the sense of preparedness, I consider it very important to understand first how the respondents imagine a prepared teacher and grasp their perceptions and priorities before asking them about their sense of preparedness.

### Within-case analysis

#### Institution 1

Three out of four respondents from Institution 1 considered as the most important feature of prepared teacher identity "resilient personality" – hence, they expect that a teacher can deal with difficult situations in school and is capable of managing highly stressful situations. A quote from one respondent summarizes well this characteristic:

"A prepared teacher should be a person who manages high stress and can free themselves from various difficult things such as episodic negative events at work - and this is difficult when working with people."

Also, having a clear vision and values was mentioned by 2/4 respondents as an important feature of a prepared teacher personality. Concerning competences, no distinct competence appeared as particularly important among all the respondents. Half of the respondents consider very important didactics, adaptation to unexpected situations (which connects to a resilient personality), and subject knowledge.

### Institution 2

Teacher identity is less evident when analyzing the responses of 5 respondents representing Institution 2 with regards to a prepared teacher. Notwithstanding, respondents presented an interesting scale of competences important for a prepared teacher, such as communication and presentation skills (3/5 respondents), self-reflection (3/5), innovative didactics (2/5), teaching students with special needs (2/5), and subject knowledge (5/5). All the respondents consider subject knowledge important. Furthermore, two respondents (both Math teachers) emphasized that subject knowledge should be at a very good level and they also responded in the online questionnaire as two out of three people who consider subject knowledge very important (all the other respondents claimed "important"). A quotation from one of these respondents is following:

"I think he (a prepared teacher) should be sufficiently prepared within his field - that is the absolute basis. And unlike some new directions, I do not doubt that the teacher should master the field very well."

### **Institution 3**

Regarding teacher identity, 4/6 respondents claimed the importance of positive relationships towards children as well as having a clear vision and values. Half of the respondents agreed that teaching experience makes a prepared teacher. All the respondents agreed that self-reflection is crucial - they mentioned it so frequently throughout the interview that it was counted as a separate code 10 times in interviews with 6 people. These aspects are well illustrated by the following citation:

"Being a prepared teacher means trying to teach many many times. I don't know what number, but truly many times they should prepare the lesson with someone experienced, teach that lesson

and reflect on that lesson. And that is crucial for me. Having practice, planning many hours, even failing, and then consciously reflecting on it."

All the respondents also expressed the significance of empathy & listening to students. 3/6 mentioned creating a learning-friendly environment. Interestingly, 4/6 respondents emphasized that subject knowledge is not very important in comparison to other essential skills or character features of a prepared teacher. Nonetheless, online questionnaires showed that on the Likert Scale, 5/6 respondents consider subject knowledge important and one even chose it to be very important.

### Cross-case analysis

Innovative approach in didactics, and thus didactics as a skill is the most common competence considered important by respondents from each institution. This is reinforced by the online questionnaire, where 13/15 respondents selected on the Likert scale "very important" regarding the ability of a teacher to explain and mediate the content. Communication and presentation skills, self-reflection (which is extremely evident by Institution 3 respondents), and adaptation to unexpected situations are the most common as well as evenly mentioned features of a prepared teacher among the respondents. In this part the focus is put solely on the prepared teacher competences because concerning codes relevant to teacher identity, no consensus is seen among respondents from all three institutions.

Many contrasts are visible especially if comparing both faculties of education (thus traditional university setting) with Institution 3. For instance, subject knowledge is seen as an important feature for 7/9 respondents from universities, and resilient personality by 4/9 respondents but by 0 respondents from Institution 3 <sup>5</sup>. On the contrary, empathy & listening to students as a core competence has been mentioned during the interview by all the Institution 3 respondents whereas this was considered important for a prepared teacher only by one respondent from Institution 2. Similarly, positive relationships towards children, the importance of experience as a teacher to be truly "prepared", creating a learning-friendly and also safe environment were explicitly mentioned by more than a half of Institution 3 respondents but were very scarcely referred by respondents from faculties. Nonetheless, creating a safe environment as an option of the Likert Scale in the online questionnaire was considered a very important skill by 14/15 respondents and important by 1/15. It is a skill on which most participants agreed to be the most important in the questionnaire. Conversely, the least important skill from the questionnaire appeared to be the skill "teaching students from different cultures": only 3 students who considered this competence very important are from faculties and these students had an abroad experience during studies which they mentioned during the interview as an important part of their university studies.

To sum up and respond to the sub-question related to novice teachers' perspectives of a prepared teacher, there are visible differences in how teachers studying different programs define a prepared teacher. The most evident contrasts are seen between the Institution 3 and respondents from faculties of education

<sup>&</sup>lt;sup>5</sup> But every respondent considered subject knowledge important in the online questionnaire when choosing on Likert Scale.

(although there are differences too). Apparently, considering all the responses, regarding teacher identity, vision & values, resilient personality, and positive relationship towards children are important to some extent. Concerning competences, the modest evidence shows the importance of self-reflection, didactics, adaptation, communication skills, creating a safe environment (the most visible through questionnaire), and subject knowledge.

### 4.1.2 Subjective sense of preparedness of novice teachers

This comparison element relates to novice teachers' perceived abilities gained through teacher education as well as perceived shortcomings of their skills.

### Within-case analysis

#### Institution 1

Most evidently, respondents claimed being prepared well in the area of didactics in practice and specified it further (e.g. planning meaningful lessons, teaching the subject). 3 respondents emphasized a good level of preparedness in subject knowledge. All the respondents feel prepared by the faculty to mediate the content to students. Half of the respondents during the interview mentioned that regarding handling corona-crisis, they learned useful technology which helps them to teach. With regards to barriers, 3/4 see mainly communication with parents (in the questionnaire no one selected being prepared either) and classroom management as a problem. Regarding formative assessment, some students emphasized that they learned how to use it in theory, but they struggle in practice. Teaching students with diverse needs had been also emphasized as problematic.

### Institution 2

According to the majority of respondents, didactics (3/5) and subject knowledge (5/5) appear to be the most evident skills that the respondents gained from their pre-service education. 2/5 claimed to feel prepared for constructivist/experiential teaching, but only in theory. Very evidently, all students claimed that they are not prepared for teaching students with diverse needs. Looking for extremes in the questionnaire, no one claimed to feel prepared for creating a safe environment, cooperating with colleagues nor handling burn-out. Based on interviews, alumni feel unprepared usually in diverse areas, there is a big variety but not much consensus. The following quote illustrates this dynamic:

"Due to the current corona crisis, I feel quite insecure in many fields and not very prepared ...

But actually, I feel prepared in subject knowledge because the bachelor's study was very theoretical and focused on the field - it was very good and detailed preparation for the subject. I also feel strong didactically mainly due to MA level, I know how to plan lessons meaningfully - I have tools I can use and know how to do it."

### **Institution 3**

It appears that respondents from Institution 3 feel well-prepared in diverse fields connected to didactics in practice (e.g. checking students' knowledge and abilities). They feel particularly prepared in

communication (5/6), self-reflection, and reflective practice (6/6). Reflective practice as a skill was claimed to be useful also regarding handling online teaching. Additionally, Institution 3 respondents claimed that the feeling of the community has been very helpful during the studies and helped them also to better handle online teaching during a covid-19 pandemic. From a didactic point of view, 3/6 respondents emphasized being prepared for teaching students with diverse needs, but 2/6 claimed being prepared well only in theory. The majority of respondents see teaching students with diverse needs as a barrier. Regarding feeling barriers, there is a variety of barriers that respondents feel (e.g. subject didactics, administration, etc.) but almost no consensus.

### Cross-case analysis

All the respondents claimed to feel prepared in diverse fields of didactics – thus, practical application of teaching methods and mediation of content to students. The majority of respondents feel to some extent prepared for self-reflection in the teaching profession. A common challenge is teaching students with diverse needs. Communication with parents is the second most common barrier among the respondents from all institutions. Formative assessment was mentioned by at least one person from each institution as a field for which respondents feel prepared sufficiently only in theory, but it is difficult in practice.

Contrasting traditional university settings and Institution 3, ex-students from faculties emphasize feeling prepared in subject knowledge, while Institution 3 respondents do not emphasize this skill. On the other hand, respondents from Institution 3 feel subjectively more prepared in communication skills and reflective practice, whereas these skills are scarcely mentioned by other respondents. Seeking the biggest contrast in the online questionnaires, which was not mentioned in the interviews, all the respondents from Institution 3 feel rather prepared for handling burn-out syndrome, while no respondent from the faculty claimed that they feel prepared for such a situation by their pre-service teacher training.

To respond to the sub-question "How prepared do the novice teachers feel after finishing pre-service teacher education?", I can conclude that it is very hard to generalize. Also, definitely the current covid-19 pandemic has a huge effect on the novice teachers' experiences. However, when searching for the most common pattern, the biggest barrier in feeling prepared stems from teaching students with diverse needs. Respondents in this research showed that there is a big variety regarding in which fields alumni feel prepared and thus it is more adequate to look at the within-case analysis and respond separately for each institution.

### 4.2 Pre-service teacher education potential

The concept is divided into three further comparison elements based on the literature review:

- a) Beneficial aspects of pre-service teacher education
- b) Pre-service teacher education shortcomings
- c) Role of admission process

### 4.2.1 Beneficial aspects of pre-service teacher education

This aspect of comparison focuses on the aspects of pre-service teacher education which were the most beneficial for the novice teachers based on their perspectives. The coded information was further divided between "Courses/contents helping to feel prepared in teaching profession" and other helpful aspects due to a big amount of information.

### Within-case analysis

### Institution 1

Regarding useful courses, respondents emphasized courses related to current and practical knowledge. Three out of four respondents appreciated discussions with colleagues at the seminars. More specifically, everyone mentioned that they valued didactics and also subjects from "Common base" — mainly the seminars and the course "Pedagogical-psychological diagnostics", which is considered very useful by every respondent. It is important to mention that students during interviews often tended to emphasize that the course very much depended on a teacher who led the course and they appreciated external speakers who brought "real-life experience".

Besides the courses, teaching practice is considered important by each respondent, and 3/4 overall valued real-life experiences which they received through the program. An example of a real-life experience that some respondents value is a subject (at BA level) where they tutored a child from a disadvantaged background:

"I realized that not all of us have the same background and that it's not just about asking which year this event happened, but also to ask just how are you? Everything is fine at home? It is ok if you don't have homework. It's good that you've come to school and you're ready to learn."

### Institution 2

Respondents from Institution 2 highly valued specific practical seminars of didactics. Regarding seminars, the majority of respondents (3/5) expressed that they valued reflections and discussions with colleagues at seminars but mentioned that it was somehow rare. They also emphasized that subject knowledge which they learned at the faculty is of a very high level – very explicit about this were 2 respondents who graduated from mathematics.

Moreover, again a characteristic of real-life experience was somehow expressed by the respondents and some type of teaching practice (either continuous or in a form of classroom observation) was considered very beneficial. Regarding teachers, students from this faculty emphasized the helpfulness of the mentors during teaching practice and also mentioned lecturers from practice. Interestingly, two respondents were also involved in the faculty association and they both considered it very relevant also for their practice,

emphasizing both positive effects of the community as well as practical skills. Also, two respondents experienced an Erasmus+ study exchange and both considered it a very relevant part of their studies.

### Institution 3

All the respondents emphasized that they appreciated the majority of the courses. More specifically, 3/6 respondents referred to a concept of weekend blocks which were useful in their intensity and connection to teaching practice. Also, half of the respondents mentioned reflective seminars and workshops on handling burnout syndrome.

The community was very well evaluated – by the community they referred to the group of students during studies but also mentioned how it continued after the program. Respondents mentioned this frequently in a connection with preventing burnout syndrome. Respondents also highly valued teachers (half of the respondents emphasized their mentors, and another half teaching being practitioners). 5/6 respondents mentioned the appreciation of their teacher guides (specific to Institution 3 context). Also, 5/6 valued reflection with colleagues which they experienced at seminars, and every respondent sees it as beneficial for their teaching practice.

### Cross-case analysis

To conclude and answer the sub-question "Which aspects of teacher education help future teachers to prepare for their profession?", it is adequate to provide a more detailed description as this comparison element is very rich in information and insights.

Reflecting on courses, it is hard to find similarities between the responses as the curriculum of Institution 3 and faculties of education are very different in structure. Considering the faculties, respondents from Institution 1 claimed high satisfaction with their "Common base" courses, and didactics, while Institution 2 respondents focused in their responses on courses relevant to Subject knowledge and even more to didactics. Institution 3 respondents either expressed satisfaction with the majority of courses or specified certain kinds of workshops as described above (e.g. related to burn-out syndrome).

The most common feature on which the respondents agreed is the usefulness of teaching practice (13/15). Online questionnaires also showed that respondents consider it generally very useful, notwithstanding, several respondents from both faculties answered in the questionnaire that they had teaching practice rather infrequently, while Institution 3 respondents claimed to have practice often. Furthermore, interviews showed that respondents generally appreciate when practice is adequately connected with support from teachers (e.g. mentoring), theory, and reflections. Respondents also generally appreciated discussion at seminars and reflections with colleagues – interactive seminars were also considered useful by 14/15 respondents in the online questionnaire. But several respondents from traditional university settings expressed both in the questionnaire and in the interview that interactive seminars were a rather rare part of their studies.

A code described as "Real-life experience" is the characteristic which was often (7/9 times) mentioned by respondents from the faculties, while in Institution 3 it was coded solely once. On the contrary, a benefit of community was more commonly perceived among Institution 3 respondents. Related to "real-life experience", respondents tended to talk about either appreciation of lecturers from practice or external speakers (e.g. principals).

It appears that among courses, mainly interactive seminars/workshops helped students to feel prepared but which kind of seminars are these depends on the outstanding quality of particulars courses – for instance, for Institution 1, the most appreciated were courses from "Common base", while for Institution 2 it was didactics. Notwithstanding, teaching practice seems to be crucial for teachers to feel prepared.

Thus, to respond to the sub-question, it is evident that mainly reflective experience (connected to teaching practice or discussion at seminars), interactive workshops/seminars (mainly related to didactics or to tackle a specific struggle in the teaching profession), and different kinds of teaching practice were showed as highly beneficial aspects of pre-service teacher education. Furthermore, instructors (e.g. mentors, external speakers) were seen as essential. These aspects thus positively shaped novice teachers' sense of preparedness.

### 4.2.2 Pre-service teacher education shortcomings

The third concept focuses on shortcomings and thus insufficient aspects of pre-service teacher education which the respondents did not consider beneficial for the teaching profession in practice. This comparison element provides an important addition to the previous element focused on beneficial aspects.

### Within-case analysis

### Institution 1

All the respondents considered lack of practice as problematic and 3/4 feel that their program lacked a sufficient amount of practical knowledge - also in the case of didactic courses. They often mentioned that they would appreciate more lessons with "people from practice" – thus e.g. experienced teachers or principals, etc. All respondents claimed that the factual knowledge which they learned was sometimes unnecessarily difficult, as expressed in this quote by a former student of History teaching:

"We were often taught by excellent academics also in supposedly teacher-related parts of studies, who, in my opinion, taught us more how to be historians than how to be teachers."

### Institution 2

All 5 respondents expressed that some parts of their studies were not adequately practical and thus they are not certain how to use what they learned in their teaching practice. Some respondents mentioned it multiple times so the number of codes is higher than the number of respondents. 4/5 respondents felt that they lacked a sufficient amount of teaching practice.

### Institution 3

Half of the respondents claimed that they received insufficient preparation in terms of inclusion and preparation for teaching students with diverse needs — more specifically, respondents claimed that although receiving education which is supposed to help them with this aspect of teaching, they feel prepared rather in theory than in practice. Furthermore, three students particularly mentioned one part of the program which was brand-new and thus of lower quality than other parts of the teacher training.

### Cross-case analysis

Not many similarities were found among all three institutions. Nonetheless, lack of preparation for inclusion/diversity was felt by 6/15 respondents, where Institution 3 respondents represented the half. 6/15 respondents also felt a lack of didactics connected to practice (where Institution 1 respondents represent 3 responses). Theoretical preparation has been mentioned in interviews several times regarding different areas (three times for Institution 1, five times for Institution 2, and four times for Institution 3). For instance, 4/15 students felt that preparation for formative assessment was too theoretical. Graduates from a traditional university setting frequently mentioned a lack of practical knowledge, and also a lack of teaching practice. Regarding the online questionnaire, the type of education form considered the least useful are lectures (5/15 respondents selected on the Likert scale rather unnecessary).

To answer the sub-question "Which aspects of teacher education represent limitations for future teachers to prepare for their profession?" there is not much consensus considering all the institutions. Also, the number of codes related to this concept is lower than with regards to describing positive parts of teacher education programs. Notwithstanding, considering the academically-oriented institutions, the most visible is the perceived lack of practicality among the respondents, and also, a perceived lack of teaching practice. Evaluating the problematic aspect present in each institution, it would be a lack of preparation for inclusion/diversity.

### 4.2.3 Role of Admission Process

The question relevant to the admission process in an interview was explicitly asked concerning the adequacy of selecting future teachers. It is probably the least complex comparison element, yet important for the whole picture, considering that the admission process has the power to create a group of students who enter the institutions with some kind of "teacher identity" and are determined to become teachers. Institution 3 considers teacher characteristics through a motivation letter, demonstration lesson, and an interview, whereas Institutions 1 and 2 only test the knowledge of candidates in diverse fields (see Table 2, element "Admission Process"). As a study conducted in the Czech Republic (SCIO, 2016) shows, a high number of potential students of teacher education are not motivated to become teachers after graduating. Furthermore, the study by Boyd et al. (2009) showed that the effectiveness of teachers is to some extent connected with entrance requirements for students of pre-service teacher education and

Czech scholars describe the admission process which focuses solely on testing knowledge as contributive to deprofessionalization of the teaching profession in the Czech Republic (Vašutová and Spilková, 2011).

#### Within-case analysis

#### Institution 1

One respondent answered that the admission process was adequate for the university and thus it is appropriate also if it does not focus on how to select appropriate future teachers. The other three respondents claimed that the admission process of Institution 1 is not adequate as it is only subject knowledge-oriented, and it misses an interview with the candidates to select the people who truly want to become teachers.

#### Institution 2

Two respondents claimed that the admission process was inadequate for the university as they saw it as overly simple and not selective enough. The other three out of five criticized that their entrance exam consisted solely of tests. Two respondents also mentioned that they missed the interview as it would help to know the motivation of the candidates to select future teachers.

#### Institution 3

Everyone considers an interview as an important and adequate part of the admission process. 5/6 respondents claimed that demonstration lesson, when candidates teach children in school is appropriate, although difficult to organize. Furthermore, 4/6 mentioned a motivation letter as an adequate part for selecting future teachers as they saw it as a very good first step to know the motivation of respondents. One quote illustrates the opinion expressed by the majority of respondents:

"It is important to find out if the person who is interested to become a teacher is interested for real and has such potential... Even after the admission process, some people realized that teaching probably wasn't really a right option for them."

As visible in the quote, the admission process which focused on the candidates' motivation, characteristics, and potential (for instance examined through a demonstration lesson) is not solely positive for the institution, which can then select more adequate candidates. It appears also positively for the candidates who through such an admission process get a possibility to rethink their motivation and potential to become teachers.

#### Cross-case analysis

It is difficult to compare the admission process of the institutions as the faculties (Institution 1 and Institution 2) educate not only future teachers but for instance also researchers, thus it is rational that an admission process is different than in Institution 3. Nonetheless, 6/9 respondents from the faculties expressed that solely knowledge testing is not sufficient when selecting candidates who will become

qualified as teachers. Moreover, 5/9 respondents from both Institution 1 and Institution 2 claimed that they consider the interview a relevant tool to select future teachers and all the Institution 3 respondents claimed the same. Institution 3 respondents furthermore did not emphasize the need to test subject knowledge probably (and some mentioned it during the interview) because they already had finished the university before, thus they were supposed to have adequate knowledge already.

Based on novice teachers' perspectives, to fulfill the potential of teacher education, an adequate entrance exam and thus selection of future teachers would probably involve at least an interview with candidates besides testing an appropriate knowledge base. Also, to underline the important role of the admission process in relevance to the preparedness of novice teachers, the respondents from Institution 3 expressed that a big benefit of their education was reflections with their colleagues and a community formed by students sharing teacher mindset. Therefore, it is evident that the findings imply the connection between admission process and sense of preparedness only indirectly. Nonetheless, to respond to the sub-question, to fulfill the potential of initial teacher education, the role of the admission process must be highly focused on the selection of future teachers, not solely university students. And under the condition of concentrating on future teacher selection, the students of pre-service teacher education can create a community of colleagues with a teacher mindset feeling more ready to become teachers.

# Chapter 5 – Discussion and Conclusion

The chapter focuses on the discussion of findings in the light of contextual characteristics of the selected case studies and broader research in the field. Furthermore, reflections on the research process, and conclusion follow.

# 5.1 Discussion of Findings

The five described comparison elements are a basis for structuring the findings and responding to the research question "How does pre-service teacher education shape the sense of preparedness of novice teachers?". Based on the findings from the focused structured comparison, I now synthesize the results into a justified response.

Considering the case selection in this research, I use the analogy of "academically-oriented", and "professionally-oriented" aspects of pre-service teacher education when referring to what was found as contributive to the sense of preparedness of novice teachers. I chose the labels "academically-oriented" especially due to the findings from faculties (as faculties are academic and their vision focuses on high scientific standards besides preparing teachers for the profession). Furthermore, at faculties mainly courses of didactics and subject knowledge preparation appeared as the most determinative to novice teachers' preparedness. When referring to Institution 3, which is solely a teacher-oriented program (thus there is no evident vision in educating future researchers, etc.) highly focused on teaching practice, I use mainly the label "professionally-oriented" aspect of pre-service teacher education.<sup>6</sup>

To begin responding to the main research question, the data suggest that teachers' sense of preparedness is affected by the respondents' type of pre-service teacher education (traditional or alternative). Respondents' perceived strengths and weaknesses differ to a large extent, and also their idea of a prepared teacher varies. Overall, teaching students with diverse needs is the biggest struggle for respondents from each institution.

Ingvarson et al. (2007) claimed that teachers feel prepared after learning well content knowledge and methods to transmit the knowledge. In this research, novice teachers who received their pre-service

<sup>&</sup>lt;sup>6</sup> See Table 2 to read more about the visions and characteristics of the case studies – institutions.

education in a traditional university setting claimed to feel prepared in subject knowledge and didactic skills - a practical application of teaching methods (mediating content to students, planning lessons, facilitating learning, etc.). Didactics appears to be enhanced well both by academically-oriented and professionally-oriented perspectives to teacher education. However, fostering also other facets during teacher education is crucial (Allen, 2009). This thesis shows that a variety of specific soft skills<sup>7</sup> (such as communication with parents, creating a safe environment, handling burn-out, etc.) is important for novice teachers' sense of preparedness. The development of such skills was found to be noticeably more related to the professionally-oriented perspective of pre-service teacher education mainly in Institution 3.

Crucial forms of education related to all of the necessary groups of skills (subject knowledge, didactics, a set of soft skills) are perceived to be enhanced well by a combination of teaching practice related to all parts of studies, mentoring, and interactive seminars/workshops where the discussions and reflections are fostered. And last but not least, instructors in the teacher education institutions are very important and there is a big variety of necessary teachers - mainly supportive and inspiring teachers with adequate knowledge related to teacher education, and mentors during teaching practice. But also, practitioners or even external speakers (e.g. principals) are partly seen by novice teachers as an important asset in reaching the sense of preparedness. Novice teachers appear to be adequately prepared mainly thanks to teaching practice (which includes the support of a mentor), seminars/workshops, discussion with colleagues, and reflections with teachers. As already researched, this study endorses the important role of teaching practice in pre-service teacher education (Mohamed et al., 2016). but also shows an intrinsic complexity of pre-service teacher education, as has been examined already in various studies (Brown et al., 2014; Darling-Hammond, 2006).

When comparing the results from online questionnaires and interviews, in the questionnaire respondents often claimed to be well prepared in a skill which they did not name or emphasize during the interview. This might be caused by estrangement from a curriculum if the subjects sound very academic (Conner and Sliwka, 2014) – for example, if the block is called "pedagogical-psychological common base", and the subject is "School Psychology", whereas in Institution 3 the block is called "Teacher and his/her intervention in the field of relationships" and an example of a workshop is very specific "Our emotions and relationship signals and their effects on students". As it is important to overcome the gap between theory and practice in the curriculum of teacher education (Darling-Hammond, 2006), I assume that designing courses to be more specific regarding what teachers are expected to learn might help to create a feeling of practical learning also in theory.

Furthermore, also being taught to a big extent through lectures with a lack of interactive discussions might cause an estrangement to what students learn, and the respondents proved it both through questionnaires

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<sup>&</sup>lt;sup>7</sup> Soft skills have not been mentioned in the study before. They are mentioned now because after the analysis, there is a visible distinction between the respondents being prepared for 1. subject knowledge, 2. didactic skills, and 3. a variety of other skills – such as communication with parents, handling burn-out, self-reflection, creating safe environment, etc. To simplify the findings, a variety of other skills is recognized as "soft" skills, because the recognized skills are close to usual definition of soft skills, which is also varied. (Cinque, 2016)

and interviews, as they considered lectures among the least useful forms of study. The respondents from academic settings claimed to feel prepared mainly in didactics which is taught almost exclusively through seminars at both faculties. Seminars are usually smaller and more engaging parts of a study. The engaging learning environment is related to effective learning principles and thus can improve pre-service teacher education evidently (Conner and Sliwka, 2014).

Nevertheless, the academic character of pre-service teacher education at universities still has its benefits for the students. Besides a high-quality subject knowledge preparedness, faculties of education do not prepare solely teachers, but it can open doors to other professions, and also further research pathways. Many teachers tended to pursue further academic pathways in Finland, which is also renowned for its teacher education curriculum balancing theory and practice (Sahlberg, 2007).

Interestingly, as studies of Institution 3 are not oriented on subject knowledge (as it is assumed that the candidates are prepared in this field already due to earned master's degree), respondents did not frequently feel that lack of subject knowledge is an issue. This could be caused by different reasons. Firstly, 5/6 respondents teach either at primary or lower secondary level which is less demanding than upper secondary schools. A second possible explanation is related to practice which is continuous and longer than at faculties of education, therefore the students received an opportunity to connect the subject knowledge with teaching to a big extent already during training, which Korthagen (2011) considers crucial. The third reason might be the prioritizing of other fields of teacher skills besides subject knowledge (subject didactics makes one of four blocks creating the curriculum). The other three blocks are focused on relationships, personal development, and creating conditions for learning. Institution 3 respondents thus emphasized being prepared in rather soft skills but are also likely more focused on those due to their pre-service education - and this is an example of how pre-service teacher education affects a sense of preparedness. Also, all the blocks were taking place next to the continuous practice. This aligns with the results of a study by Allen (2009), which showed that students stopped feeling distant from the knowledge they learned once they were able to experience and connect them adequately in practice.

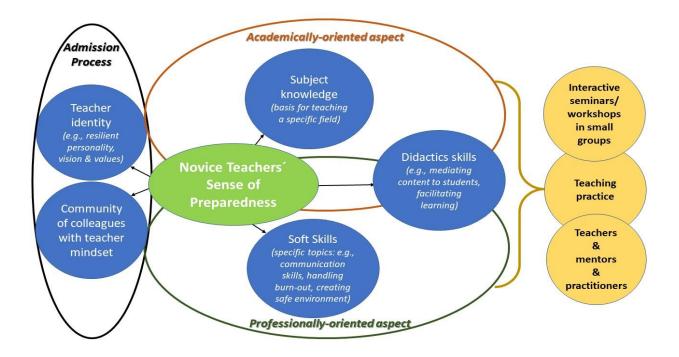
The biggest barrier for all the respondents was teaching students with diverse needs. Also, in the survey TALIS (2018), Czech teachers expressed the lowest feeling of preparedness to teach students with special needs. Nonetheless, even though challenging, it is important to equip teachers with skills to handle diversity in the classroom (Schleicher, 2011). The respondents who claimed in the online questionnaire to be prepared for teaching students with diverse needs also admitted in the interview that it is still is very difficult to master in practice. As a helpful technique, the respondents referred to graded task assignments – however, students also claimed to be for this rather theoretically prepared as they see it as a difficult method. This aligns with research by Kahn and Lewis (2014), where it is emphasized that being prepared for teaching students with diverse needs should be connected with intensive training, as it is challenging to adapt to the individual needs of each student.

The admission process is considered relevant regarding the quality of teacher education. To ensure an adequate selection of future teachers, besides academic knowledge, criteria such as motivation, personal qualities, communication skills, etc. are considered important (Barber and Mourshed, 2007; Heinz, 2013; Ingvarson and Rowley, 2017). The respondents' opinions in this study align with such a statement. The majority of all the respondents described the importance of an interview to evaluate the motivation of becoming a teacher, and personal features, thus teacher identity, when entering pre-service teacher education institutions. Furthermore, reflections at seminars and discussions with colleagues were beneficial for all the respondents regardless of the program. We can hence assume that if almost exclusively candidates truly interested in the teaching profession enter the institution, it would positively affect the community of colleagues with teacher mindset who can then share more adequate experiences among each other.

Notwithstanding, in academia, the role of the admission process is not frequently connected with the consequent effects on pre-service teacher education. As shown in this research, the only program of Institution 3 which included the admission process that considered teacher potential and motivation also created a more coherent community of people with a teacher mindset. And such a community – a group of students with a teacher mindset - has been valued highly regarding the sense of preparedness. Nonetheless, there is no evidence to what extent the admission process played a role in creating a community and there might have been other factors involved. However, based on the teachers' perspectives, a proper selection of future teacher candidates considering their motivation is important and such an admission process can likely result in a more supportive and thus efficient learning environment for future teachers, which contributes to the preparedness of certified novice teachers.

To sum up, the figure (below) shows an example of pre-service teacher education that adequately shapes the sense of preparedness, based on the evidence gained in this research through cross-case analyses of five comparison elements. Two programs from a traditional university setting represent an academically oriented aspect of pre-service teacher education. The respondents from this program claimed to feel mainly prepared for subject knowledge and didactics. Respondents from Institution 3, which is a more professionally-oriented program with a strong practical element preparing future teachers who already earned their master's degree, claimed to be prepared more in a varied set of soft skills and also didactics. Besides being already prepared for subject knowledge, Institution 3 respondents considered the skills of subject knowledge less important than the respondents from more academically-oriented settings. Commonly, the respondents agreed on the importance of interactive seminars/workshops where the knowledge-sharing and reflections take place. Also, knowledge related to teaching in practice was very valued accompanied by inspiring instructors (e.g. teachers, mentors, practitioners). Furthermore, as explained above, the admission process has the potential to contribute to an inspiring community of future teachers with a teacher identity, mindset, and potential.

Figure 2 – Example of Pre-service Teacher Education that Positively Shapes Teachers' Sense of Preparedness



# 5.2 Reflections on methodology and future research

To compare the efficiency of three pre-service teacher education institutions to prepare future teachers based on such a small sample and a variety of fields explored would be inappropriate and might result in superficial analysis. However, the comparative analysis is not used to compare which institution is more efficient in teacher preparation. A comparative analysis is used as a tool to explore a concept of the sense of preparedness of novice teachers' regarding a specific context of teachers' reality, thus pre-service teacher education.

The findings of this comparative case study indicate what the teachers perceive as their own preparedness, not how they are prepared objectively (by measurable tools or methods). Hence, this research does not imply how novice teachers are truly prepared, only how much and in which areas they feel ready to teach, or in which fields they feel lack of knowledge. The research tried to connect these perceptions of beginning teachers to their initial teacher education. As further research, I would recommend a more specific study focused on potentially measuring how well-prepared teachers of diverse types of preservice teacher education institutions or programs are in certain areas - namely in subject knowledge, didactics (teaching) skills, and a variety of soft skills. Additionally, I see potential in a similar type of research with a bigger sample to enhance the generalizability of the findings.

#### 5.3 Conclusion

The objective of this thesis is to contribute to the research focusing on pre-service teacher education's role in affecting teachers' sense of preparedness. I consider the Czech context and specific teacher education institutions. Pre-service teacher education in the Czech Republic is in a complicated situation considering the low interest of students to enroll in teacher education programs (SCIO, 2016) as well as Czech teachers' perceived low sense of preparedness in certain areas (OECD, n.d. [2018]).

The thesis aimed to respond to the research question: *How does pre-service teacher education shape* the sense of preparedness of novice teachers? As the research employed a comparative approach, I also explored differences regarding novice teachers' sense of preparedness across three pre-service teacher education institutions.

Pre-service teacher education shapes novice teachers' sense of preparedness in diverse ways. Firstly, it affects what they define as important for being a prepared teacher. A comparison of findings showed that if teachers did not receive their pre-service teacher education focused primarily on subject knowledge, they also consider prioritizing it less over other competences. On the contrary, the experience of a high-quality subject knowledge preparation as a part of teacher training in an academic setting results in evident valuing of hard skills besides a variety of soft skills.

A comparative approach allowed us to see a difference between academically-oriented aspects and professionally-oriented aspects of pre-service teacher education. The results demonstrate that the academically-oriented part of teacher education likely indicates a good level of preparation in hard skills – thus subject knowledge and didactic skills (practical application of teaching methods). A more professionally oriented type of teacher education with specialized interactive workshops and extensive teaching practice suggests fostering a sense of preparedness also in didactics, but more evidently in soft skills (most evidently in self-reflection, reflective teaching practice, and communication skills). The most useful form of learning in all three selected cases was teaching practice, and interactive seminars/workshops – highly evaluated mainly if connected to reflections with colleagues. Also mentoring was considered very useful, although presumably not experienced by every respondent, thus it did not appear as valued as other forms of learning.

It is important to note that this research aim was not to compare which type of pre-service teacher education institution educates teachers in a better way. All three institutions provide different kinds of training which have their benefits. It is very difficult to judge the value due to the very different contextual characteristics of the institutions. Also, used data collection tools are subjective, because the findings are based solely on 15 novice teachers' personal perspectives and experiences. Nonetheless, the voice was given to novice teachers and the consequent analysis of the data (interviews and online questionnaires) allowed me to summarize the teachers' perceptions into structured findings.

Institution 3 is a new initiative focusing clearly on providing innovative evidence-based teacher education and it alternatively shows a more professionally-oriented approach with extensive reflective teaching practice. The faculties of education are naturally more academically-oriented. Although providing teaching practice and other elements necessary for future teachers too, the focus of the institutions is also academic and scientific, focused also on providing students with knowledge beyond the scope of being prepared teachers, but also for being prepared researchers in the field of education, or potentially other professions. Thus, I would argue that a focus on a more professionally-oriented approach towards preparing future teachers might help to overcome the deprofessionalization trend regarding teacher training (Vašutová and Spilková, 2011). This aspect of the study is relevant also beyond the Czech Republic as the deprofessionalization phenomenon is present also internationally (Milner, 2013).

Based on the empirical findings and analysis, I suggest that pre-service teacher education should foster a balance between academically-oriented and professionally-oriented sections and components of teacher training in order to develop both hard and soft skills. Also, an adequate set of hard and soft skills would likely be enhanced adequately if connected with appropriate extensive teaching practice, interactive forms of education (e.g., workshops, seminars), and instructors fulfilling diverse roles (e.g., practitioners, mentors, academics). To ensure a coherent group of beginning future teachers, it may be necessary for this type of educational institution to provide an admission process that also considers the teacher mindset by assessing the candidate's motivation and personality. Practical implications of research suggest that it is important to design teacher education programs that foster novice teachers' sense of preparedness. A recommendation with regards to priorities of such a program relate to the needs of novice teachers mastering both hard skills, such as subject knowledge, and soft skills (e.g., communication, handling burn-out) next to the essential didactic (teaching) skills. Continuous improvement of teacher education combined with the motivation of high-quality applicants to become teachers is very meaningful also given the situation in the Czech Republic, where lack of interest in the teaching profession has become an urgent problem (ČT24, 2020).

Although there are visible struggles in the teaching profession in the Czech Republic, likely, there is no one solution but there should be a combination of steps taken to continue with improving both the quality of teacher training as well as the attractiveness of the profession. We live in dynamic times and thus the current challenges might transform soon into new difficulties to which the system will have to react. Therefore, teachers are likely to need a diverse combination of pedagogical approaches to respond to a variety of demands (Robertson and Dale, 2015). Considering this aspect, it is probably impossible to evaluate which approach to educating teachers is the most effective. But we should build on a diversity of various high-quality approaches to education – both "traditional" as well as "alternative".

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# 7 Appendices

# 7.1 Overview of respondents

Pre-service teacher education institution	Year of finishing studies*	Time period of active teaching (at the moment of interview**)
Institution 1	2019	1 year
Institution 1	2020	1 year and 3 months
Institution 1	2020	1 year and 3 months
Institution 1	2020	9 months
Institution 2	2019	5 years
Institution 2	2020	2 years
Institution 2	2020	3 months
Institution 2	2020	1 year and 3 months
Institution 2	2020	1 year and 3 months
Institution 3	2019	2 years and 3 months
Institution 3	2020	4 years and 3 months
Institution 3	2020	3 years
Institution 3	2020	2,5 years
Institution 3	2020	3 years and 3 months
Institution 3	2020	3 years

<sup>\*</sup>some respondents were still officially students due to postponement of the final state exam — thus technically they did not take any courses at the university anymore but they were awaiting the period (which is twice a year) when they are allowed to take the final state exam and officially graduate. Final state exam (státní závěrečná zkouška) is specific to the Czech higher education system and the last step to earn a degree, there is no course related to this exam, the exams can take place only after a student passes all the courses and earn the number of credits necessary to graduate. All the respondents claimed to have passed all the courses.

# Other important contextual criteria taken into consideration in the data analysis but not revealed in the table above due to the respected confidentiality of the respondents:

> Specializations in teaching the following subjects: Math, Physics, Czech, Basics of Social Sciences, History, Geography, French, English, Media education, Information and communications technology

<sup>\*\*</sup>active teaching means a practice as an official teacher working at a primary or secondary school (hence, not for example tutoring, teaching in language schools etc.)

- ➤ Gender: 7 men and 8 women each of the two genders represented in each institution
- Most of the respondents are considered "full-time teachers" (11/15), 2 respondents (graduates from different institutions) teach part-time, and 2 respondents (graduates from different institutions) teach only 4-5 hours a week
- ➤ Diversity of respondents teaching at different types of schools (only 1 out of 15 respondents currently teaches solely at primary level):
- ➤ Institution 1: 2 respondents teach at the primary and lower secondary level, 1 respondent at both upper and lower secondary level, 1 respondent at the lower secondary level
- ➤ Institution 2: 2 respondents teach at the lower secondary level, 3 respondents teach at the upper secondary level
- ➤ Institution 3: 1 respondent teaches at primary level, 3 respondents teach at the primary and lower secondary level, 1 respondent at the lower secondary level, 1 respondent at secondary (both upper and lower) level

# 7.2 Template: Semi-structured interview

\*The original language of the semi-structured interview was Czech, it was translated to English only afterward.

# Respondent profile

- 1. Please briefly introduce where you teach at what school and what subjects, for how long.
- 2. Have you taught at other schools?
- 3. Why did you decide to be a teacher?

#### Entrance exams

- 4. Why did you choose this institution for your preparation for the teaching profession?
- 5. Do you remember what the entrance exams were and what they included?
- 6. In your opinion, were the entrance exams adequate to select future teachers?

The main part – sense of preparedness & pre-service teacher education

- 7. Please define who you think is a ready/prepared teacher? Hence, what should a prepared graduate handle in the teaching profession?
- 8. In what areas do you feel ready to teach thanks to the pre-service teaching program you have completed?
- 9. Which parts of the study do you value most in retrospect? / What parts of your teaching program do you consider most useful for your profession?
- 10. What barriers do you experience in teaching thus in what else do you need to master to feel like a fully prepared teacher?
- 11. What do you have to learn on your own in your teaching practice?

- 12. What was the weakest aspect of your study?
- 13. What have you learned and find it useful, but you cannot use in practice? (because you don't know how to use the skill for instance)
- 14. (Corona-Crisis: How prepared are you as a teacher to cope with the corona crisis?
- 15. What else has prepared you for teaching profession besides your pre-service teaching program?
- 16. How long do you plan to teach? Are you worried about burnout?

(Bonus part only for those who actively studied in the spring semester 2020 - the impact of the corona crisis)

17. How your teaching program managed to educate you in the last semester at the time of the corona-crisis?

#### Last part:

- 18. How would you characterize a program that really prepares teachers for their profession?
- 19. To what extent does your program meet your ideal pre-service teacher education program?

# 7.3 Template: Online Structured Questionnaire

\*The original language of the questionnaire was Czech, it was translated to English only afterward

#### A. Basic information

- 1. Your name:
- 2. Please describe the specific field/program related to teaching that you studied and at which institution (if you have studied more than one field in more than one institution, please list all of them):
- 3. What other field did you complete at university than teaching? Please describe the specific field and where exactly they studied (if you have studied more than one field, please list all of them)
- 4. What is the highest level of education you have achieved?
- 5. How long have you been actively teaching?
- 6. What school do you teach at (name and address / location of the school)?
- 7. How many hours a week do you teach on average?
- 8. What grades do you teach?
- 9. What subjects do you teach (please list all, including those you have not studied)?
- B. Your pre-service teacher education

Questions about your education always relate to your education at the institution on the basis of which you were approached as a suitable respondent for this research because you graduated from this institution in 2019 or 2020. They do not concern your education that you received otherwise (job training, self-study, etc.).

#### (The same set of responses for questions 10, 11, and 12)

- 10. How often have you used to had at the institution where you studied the following forms of study:
- Options: 1) "Very often" 2) "Often" 3) "Sometimes" 4) "Never"
- 11. To what extent do you find the teaching method useful?

Options: 1) Completely useless 2) A little useful 3) Very useful 4) Very useful 5) Not relevant (I did not complete such a method of teaching)

12. In what way will the subjects or parts of the study come back to you as very useful for your profession? Please write in the list next to the specific examples of parts of the study (for example, the courses you have taken) that you found extremely useful for your practice.

E.g.: a) Interactive workshops / seminars on various topics and methods related to education (eg how to manage inclusion) - "Workshop focused on managing inclusion"

- d) Written elaboration of topics relevant in teaching with the help of the study of professional literature
   "Diploma thesis on the topic" Project teaching "/" Essay on the topic of self-reflection in practice "
- (Next to each statement, a box will appear where they will be able to fill in what specific part of the study prepared them for the given competence.)
- a) Interactive workshops / seminars on various topics and methods related to education (eg how to manage inclusion)
- b) Educational conferences or scientific seminars (at which teachers and / or researchers present their research results and discuss educational issues)
- c) Observation visits to other schools (excursions to other schools)
- d) Written elaboration of topics relevant in teaching with the help of the study of professional literature
- e) Mentoring and coaching
- f) Work in groups
- g) Pair teaching
- h) Lectures
- i) Practice (listening, continuous practice, etc.)

#### i) Other (specify):

C. Teacher readiness competencies

(The same set of responses for questions 13, 14, and 15)

13. To what extent do you consider the following competencies important for a teacher in practice?

Options: 1) Very important 2) Important 3) Not important 4) Not important

Please keep in mind that we are asking how well your studies at the institution you completed before

qualifying as a teacher prepared you, not how well you master these areas on your own initiative / self-

study, etc.

14. To what extent do you feel prepared by your institution in the following areas?

Options: 1) Completely unprepared 2) Rather unprepared 3) Rather prepared 4) Very well prepared

15. How did the teaching program prepare you for these areas? Please give an example of a specific part of the study that prepared you for the area. If no part of the study has been devoted to the area, state X.

For example: Adapting teaching to respond to the strengths and needs of all pupils - even with any special needs or mild disabilities: "I am prepared for an inclusion seminar."

(Next to each statement, a box will appear and they will be able to fill in what part of the study prepared them for the given competence.)

- a) Professional knowledge of subjects and curriculum in terms of content
- b) Mediation of content to students the ability to explain the subject
- c) Facilitation of teaching creating effective opportunities in the classroom so that students can learn on their own and autonomously
- d) Use of technologies in the classroom
- e) Creating a safe environment preventing bullying, building trust between children
- f) Teaching students from different cultures (e.g.: living in the Czech Republic but coming from a minority ethnic group or children of immigrants)

- g) Adapting teaching to respond to the strengths and needs of all pupils even with special needs or mild <u>disabilities</u>
- h) Giving feedback to students so that assessment helps students in their further development
- j) Leading students to responsibility for their own educational process and behavior
- k) Coping with students with complicated attitudes / higher need for external motivation (eg indiscipline, behavioral problems, loss of motivation in learning)
- 1) Cooperation with colleagues with other teachers, teaching assistants, etc.
- m) Cooperation and communication with students' parents
- n) Lifelong learning, self-reflection of one's own work and adaptation to new situations and forms of learning (eg as in the case of a coronary crisis)
- o) Self-reflection of own work
- p) Ability to stay motivated and prevent "Burnout" (physical or mental collapse caused by overwork or stress)

#### 7.4 Informed Consent



#### **Consent for Voluntary Participation in Interview and Questionnaire**

I - <u>Name</u> - volunteer to participate in a research project conducted by Bc. Daša Gardošíková who conducts research as an essential of The Master program in **Education Policies for Global Development** (GLOBED) at **the Universitat Autònoma de Barcelona**; the College of Social Sciences from the University of Glasgow; the Department of Political Sciences from the University of Bremen; and the Department of Educational Sciences from the University of Cyprus. Conducting an interview and an online questionnaire are crucial parts for the research conducted by Daša Gardošíková as those are among the main data sources for writing her thesis.

I understand that the project is designed to gather information about my experience as a (former) student of the teacher initial education program and my experience in the teaching profession. I will be one of approximately 15 people being interviewed for this research.

- 1. My participation in this project is voluntary. I understand that I will not be paid for my participation. I may withdraw and discontinue participation at any time without penalty.
- 2. If I feel uncomfortable in any way during the interview session, I have the right to decline to answer any question or to end the interview.

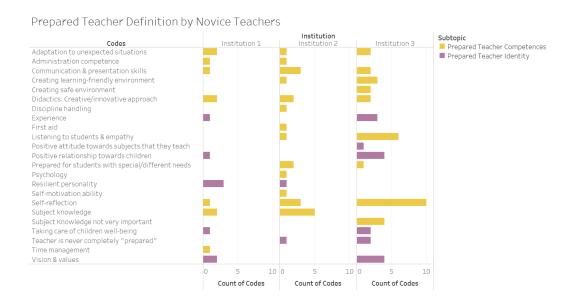
- 3. The interview will last approximately 45 minutes (in case it happens to be longer, the maximum length is 1 hour).
- 4. Notes will be written during the interview. An audiotape of the interview will be made.
- 5. I understand that the researcher will not identify me by name in any reports using information obtained from this interview and questionnaire and that my confidentiality as a participant in this study will remain secure. Subsequent uses of records and data will be subject to standard data use policies that protect the anonymity of individuals and institutions.
- 6. No one else besides the student conducting the research will neither be present at the interview nor have access to raw notes or transcripts. This precaution will prevent my individual comments from having any negative repercussions.
- 7. I understand that this research study has been reviewed and approved by the GLOBED Education Policies for Global Development Board.
- 8. I have read and understood the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.
- 9. I have been given a copy of this consent form.

I voluntarily make this declaration, agree with all the points above, and freely consent to the collection and processing of my data for the research by Daša Gardošíková.

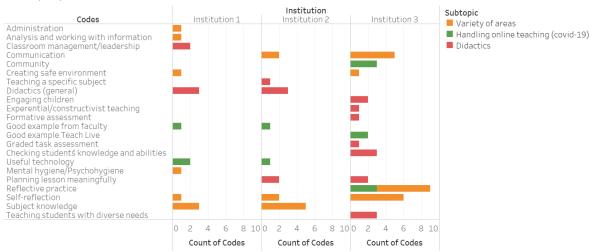
My Signature	Signature of the Researcher
Place & Date	Place & Date

# 7.5 Visualizations of codes gained from semi-structured interviews

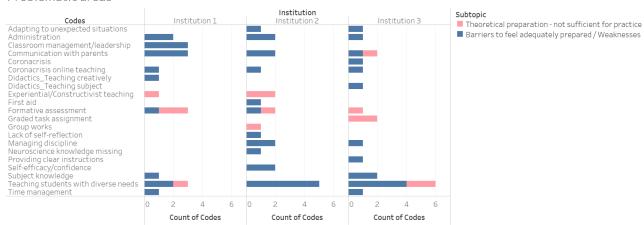
## Concept: Sense of Preparedness



# Well-prepared fields

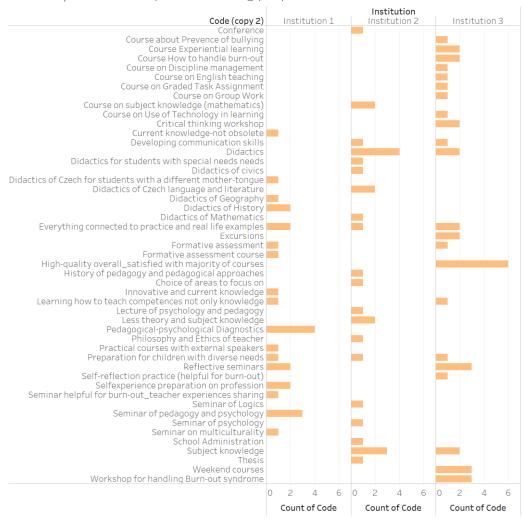


#### Problematic areas

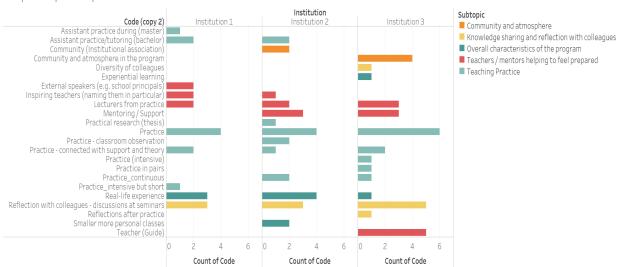


# Concept: Pre-service teacher education potential

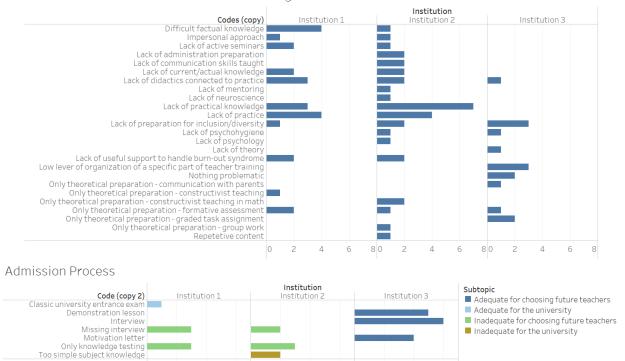
Courses/contents helpful for feeling prepared







### Pre-Service Teacher Education Shortcomings



# 7.6 Overview – Responses to Likert Scale Questions (online questionnaire)

Count of Code

Count of Code

\*Raw data in Czech language (not translated to English as this was a complementary source)

\*\*Anonymized responses – only Likert Scale questions are provided due to reassured anonymity

4

Count of Code

1	Institution	a) Interaktivní workshopy / semináře na různá témata a metody související se vzděláváním (např. jak zvládat inkluzi)::11. Jak často jste mívali ve vaší přípravě na institucí kde jste studovali tyto formy studia:	b) Vzdělávací konference nebo vědecké semináře - na kterých učitelé a / nebo výzkumní pracovníci prezentují své výsledky výzkumu a diskutují o vzdělávacích problémech::11. Jak často jste mívali ve vaší přípravě na instituci kde jste studovali tyto formy s	c) Pozorovací návštěvy v jiných školách - (exkurze na jiných školách): 11. Jak často jste mívali ve vaší přípravě na instituci kde jste studovali tyto formy studia:	d) Písemné práce na témata relevantní v učitelství s použitím odborné literatury ::11. Jak často jste mívali ve vaší přípravě na instituci kde jste studovali tyto formy studia:	e) Mentoring a koučování::11. Jak často jste mívali ve vaší přípravě na instituci kde jste studovali tyto formy studia:
2	Institution 1	3) Občas	3) Občas	4) Nikdy	2) Často	3) Občas
3	Institution 2	3) Občas	3) Občas	2) Často	4) Nikdy	4) Nikdy
4	Institution 1	3) Občas	4) Nikdy	2) Často	3) Občas	4) Nikdy
5	Institution 2	4) Nikdy	3) Občas	3) Občas	2) Často	4) Nikdy
6	Institution 2	3) Občas	4) Nikdy	3) Občas	3) Občas	4) Nikdy
7	Institution 1	3) Občas	3) Občas	3) Občas	2) Často	3) Občas
8	Institution 3	1) Velmi často	3) Občas	1) Velmi často	1) Velmi často	1) Velmi často
9	Institution 2	2) Často	1) Velmi často	2) Často	2) Často	2) Často
10	Institution 2	3) Občas	3) Občas	2) Často	3) Občas	4) Nikdy
11	Institution 3	1) Velmi často	1) Velmi často	1) Velmi často	1) Velmi často	1) Velmi často
12	Institution 3	1) Velmi často	2) Často	1) Velmi často	3) Občas	2) Často
13	Institution 3	1) Velmi často	1) Velmi často	1) Velmi často	2) Často	1) Velmi často
14	Institution 3	1) Velmi často	4) Nikdy	1) Velmi často	1) Velmi často	2) Často
15	Institution 3	1) Velmi často	1) Velmi často	1) Velmi často	4) Nikdy	1) Velmi často
16	Institution 1	2) Často	4) Nikdy	4) Nikdy	2) Často	3) Občas

f) Práce ve skupinách::11. Jak často jste mívali ve vaší přípravě na instituci kde jste studovali tyto formy studia:	g) Párová výuka (např. dva učitelé nebo spolupráce pedagoga a studenta)::11. Jak často jste mívali ve vaší přípravě na instituci kde jste studovali tyto formy studia:	h) Přednášky::11. Jak často jste mívali ve vaší přípravě na instituci kde jste studovali tyto formy studia:	i) Praxe (náslechy, souvislá praxe, etc.)::11. Jak často jste mívali ve vaší přípravě na instituci kde jste studovali tyto formy studia:	a) Interaktivní workshopy / semináře na různá témata a metody související se vzděláváním (např. jak zvládat inkluzi)::12. Do jaké míry byl pro Vás daný typ výuky užitečný?
2 2) Často	3) Občas	1) Velmi často	1) Velmi často	1) Velmi užitečný
3 2) Často	4) Nikdy	1) Velmi často	3) Občas	1) Velmi užitečný
4 2) Často	4) Nikdy	1) Velmi často	1) Velmi často	2) Spíše užitečný
5 3) Občas	4) Nikdy	1) Velmi často	3) Občas	1) Velmi užitečný
6 3) Občas	4) Nikdy	1) Velmi často	3) Občas	2) Spíše užitečný
7 3) Občas	4) Nikdy	1) Velmi často	3) Občas	1) Velmi užitečný
8 1) Velmi často	1) Velmi často	3) Občas	1) Velmi často	1) Velmi užitečný
9 2) Často	3) Občas	1) Velmi často	2) Často	3) Spíše neužitečný
10 3) Občas	4) Nikdy	1) Velmi často	2) Často	1) Velmi užitečný
11 1) Velmi často	1) Velmi často	1) Velmi často	1) Velmi často	1) Velmi užitečný
12 2) Často	2) Často	2) Často	1) Velmi často	1) Velmi užitečný
13 1) Velmi často	1) Velmi často	2) Často	1) Velmi často	1) Velmi užitečný
14 1) Velmi často	1) Velmi často	4) Nikdy	1) Velmi často	1) Velmi užitečný
15 1) Velmi často	1) Velmi často	1) Velmi často	1) Velmi často	1) Velmi užitečný
16 1) Velmi často	3) Občas	1) Velmi často	2) Často	1) Velmi užitečný

b) Vzdělávací konference nebo vědecké semináře - na kterých učitelé a / nebo výzkumní pracovníci prezentují své výsledky výzkumu a diskutují o vzdělávacích problémech::12. Do jaké míry byl pro Vás daný typ výuky užitečný?	c) Pozorovací návštěvy v jiných školách - (exkurze na jiných školách)::12. Do jaké míry byl pro Vás daný typ výuky užítečný?	d) Písemné práce na témata relevantní v učitelství s použitím odborné literatury ::12. Do jaké míry byl pro Vás daný typ výuky užitečný?	e) Mentoring a koučování::12. Do jaké míry byl pro Vás daný typ výuky užitečný?
2 2) Spíše užitečný	5) Není relevantní (neabsolvoval jsem takový způsob výuky)	3) Spíše neužitečný	1) Velmi užitečný
3 3) Spíše neužitečný	2) Spíše užitečný	3) Spíše neužitečný	1) Velmi užitečný
4 5) Není relevantní (neabsolvoval jsem takový způsob výuky)	1) Velmi užitečný	4) Zcela neužitečný	5) Není relevantní (neabsolvoval jsem takový způsob výuky)
5 2) Spíše užitečný	1) Velmi užitečný	3) Spíše neužitečný	5) Není relevantní (neabsolvoval jsem takový způsob výuky)
6 5) Není relevantní (neabsolvoval jsem takový způsob výuky)	2) Spíše užitečný	2) Spíše užitečný	5) Není relevantní (neabsolvoval jsem takový způsob výuky)
7 3) Spíše neužitečný	1) Velmi užitečný	2) Spíše užitečný	2) Spíše užitečný
8 1) Velmi užitečný	1) Velmi užitečný	1) Velmi užitečný	1) Velmi užitečný
9 2) Spíše užitečný	3) Spíše neužitečný	2) Spíše užitečný	2) Spíše užitečný
10 3) Spíše neužitečný	1) Velmi užitečný	2) Spíše užitečný	5) Není relevantní (neabsolvoval jsem takový způsob výuky)
11 1) Velmi užitečný	1) Velmi užitečný	1) Velmi užitečný	1) Velmi užitečný
12 1) Velmi užitečný	1) Velmi užitečný	2) Spíše užitečný	1) Velmi užitečný
13 1) Velmi užitečný	1) Velmi užitečný	2) Spíše užitečný	1) Velmi užitečný
14 5) Není relevantní (neabsolvoval jsem takový způsob výuky)	2) Spíše užitečný	1) Velmi užitečný	2) Spíše užitečný
15 1) Velmi užitečný	1) Velmi užitečný	5) Není relevantní (neabsolvoval jsem takový způ	1) Velmi užitečný
16 5) Není relevantní (neabsolvoval jsem takový způsob výuky)	5) Není relevantní (neabsolvoval jsem takový způsob výuky)	2) Spíše užitečný	2) Spíše užitečný

f) Práce ve skupinách::12. Do jaké míry byl pro Vás daný typ výuky užitečný?	g) Párová výuka (např. dva učitelé nebo spolupráce pedagoga a studenta)::12. Do jaké míry byl pro Vás daný typ výuky užitečný?	h) Přednášky::12. Do jaké míry byl pro Vás daný typ výuky užitečný?	i) Praxe (náslechy, souvislá praxe, etc.)::12. Do jaké míry byl pro Vás daný typ výuky užitečný?	a) Odborná znalost předmětů a učíva po obsahové stránce::14. Do jaké míry považujete následující kompetence za důležité pro učitele připraveného na praxi?
2 2) Spíše užitečný	1) Velmi užitečný	2) Spíše užitečný	1) Velmi užitečný	2) Důležité
3 2) Spíše užitečný	2) Spíše užitečný	3) Spíše neužitečný	1) Velmi užitečný	2) Důležité
4 2) Spíše užitečný	5) Není relevantní (neabsolvoval jsem takový způsob výuky)	3) Spíše neužitečný	2) Spíše užitečný	2) Důležité
5 2) Spíše užitečný	5) Není relevantní (neabsolvoval jsem takový způsob výuky)	3) Spíše neužitečný	1) Velmi užitečný	2) Důležité
6 2) Spíše užitečný	5) Není relevantní (neabsolvoval jsem takový způsob výuky)	3) Spíše neužitečný	1) Velmi užitečný	1) Velmi důležité
7 3) Spíše neužitečný	5) Není relevantní (neabsolvoval jsem takový způsob výuky)	3) Spíše neužitečný	2) Spíše užitečný	2) Důležité
8 1) Velmi užitečný	1) Velmi užitečný	1) Velmi užitečný	1) Velmi užitečný	2) Důležité
9 2) Spíše užitečný	2) Spíše užitečný	1) Velmi užitečný	2) Spíše užitečný	1) Velmi důležité
10 3) Spíše neužitečný	5) Není relevantní (neabsolvoval jsem takový způsob výuky)	2) Spíše užitečný	1) Velmi užitečný	2) Důležité
11 1) Velmi užitečný	1) Velmi užitečný	1) Velmi užitečný	1) Velmi užitečný	2) Důležité
12 1) Velmi užitečný	1) Velmi užitečný	1) Velmi užitečný	1) Velmi užitečný	2) Důležité
13 1) Velmi užitečný	1) Velmi užitečný	2) Spíše užitečný	1) Velmi užitečný	2) Důležité
14 1) Velmi užitečný	1) Velmi užitečný	5) Není relevantní (neabsolvoval jsem takový způ	1) Velmi užitečný	2) Důležité
15 1) Velmi užitečný	1) Velmi užitečný	1) Velmi užitečný	1) Velmi užitečný	1) Velmi důležité
16 2) Spíše užitečný	2) Spíše užitečný	2) Spíše užitečný	1) Velmi užitečný	2) Důležité

	b) Zprostředkování obsahu studentům - schopnost učivo vysvětlovati:14. Do jaké míry považujete následující kompetence za důležité pro učitele připraveného na praxí?	c) Facilitace výuky - vytváření efektivních příležitosti ve třídě, aby se studenti mohli učit i sami a autonomně::14. Do jaké míry považujete následující kompetence za důležité pro učitele připraveného na praxí?	d) Využívání informačních technologií ve vzdělávání::14. Do jaké míry považujete následující kompetence za důležité pro učitele připraveného na praxí?	e) Vytváření bezpečného prostředí - předcházení šikaně, navazování důvěry mezi dětmi::14. Do jaké míry považujete následující kompetence za důležité pro učitele připraveného na praxí?	f) Učení studentů z různých kultur (např.: žijících v ČR, ale pocházejících z menšinového etnika nebo děti imigrantů)::14. Do jaké míry považujete následující kompetence za důležité pro učitele připraveného na praxí?
2	l) Velmi důležité	2) Důležité	1) Velmi důležité	1) Velmi důležité	2) Důležité
3	I.) Velmi důležité	1) Velmi důležité	2) Důležité	1) Velmi důležité	2) Důležité
4 :	I) Velmi důležité	2) Důležité	1) Velmi důležité	1) Velmi důležité	3) Málo důležité
5 :	I) Velmi důležité	1) Velmi důležité	1) Velmi důležité	1) Velmi důležité	1) Velmi důležité
6	I) Velmi důležité	1) Velmi důležité	2) Důležité	1) Velmi důležité	1) Velmi důležité
7	I) Velmi důležité	1) Velmi důležité	1) Velmi důležité	1) Velmi důležité	1) Velmi důležité
8 2	?) Důležité	1) Velmi důležité	2) Důležité	1) Velmi důležité	2) Důležité
9 :	l) Velmi důležité	2) Důležité	3) Málo důležité	2) Důležité	3) Málo důležité
10	I) Velmi důležité	1) Velmi důležité	2) Důležité	1) Velmi důležité	3) Málo důležité
11 :	I) Velmi důležité	1) Velmi důležité	1) Velmi důležité	1) Velmi důležité	2) Důležité
12	l) Velmi důležité	1) Velmi důležité	2) Důležité	1) Velmi důležité	2) Důležité
13	l) Velmi důležité	1) Velmi důležité	2) Důležité	1) Velmi důležité	2) Důležité
14	?) Důležité	1) Velmi důležité	2) Důležité	1) Velmi důležité	3) Málo důležité
15	I.) Velmi důležité	1) Velmi důležité	3) Málo důležité	1) Velmi důležité	2) Důležité
16	I) Velmi důležité	2) Důležité	2) Důležité	1) Velmi důležité	3) Málo důležité

1	g) Přizpůsobení výuky tak, aby reagovala na potřeby všech žáků - i s případnými speciálními potřebami či mírnými handicapy:: 14. Do jaké míry považujete následující kompetence za důležité pro učitele připraveného na praxí?	h) Dávat zpětnou vazbu studentům, aby hodnocení studentům pomáhalo v jejich dalším rozvoji::14. Do jaké míry považujete následující kompetence za důležíté pro učitele připraveného na praxi?	i) Vedení studentů k zodpovědnosti za svůj vlastní vzdělávací proces a chování::14. Do jaké míry považujete následující kompetence za důležité pro učitele připraveného na praxí?	j) Zvládání studentů s komplikovanými postoji / vyšší potřebu vnější motivace (například nedisciplinovanost, problémy s chováním, ztráta motivace v učení):14. Do jaké míry považujete následující kompetence za dúležité pro učitele připraveného na praxi?	k) Spolupráce s kolegy – s ostatními učiteli, asistenty pedagoga apod.::14. Do jaké míry považujete následující kompetence za důležité pro učitele připraveného na praxi?
	1) Velmi důležité	2) Důležité	1) Velmi důležité	1) Velmi důležité	1) Velmi důležité
3	1) Velmi důležité	1) Velmi důležité	1) Velmi důležité	1) Velmi důležité	2) Důležité
	2) Důležité				2) Důležité
	2) Důležité				1) Velmi důležité
	1) Velmi důležité 1) Velmi důležité				1) Velmi důležité 1) Velmi důležité
	1) Velmi důležité				1) Velmi důležité
	3) Málo důležité				2) Důležité
	1) Velmi důležité	1) Velmi důležité	2) Důležité		1) Velmi důležité
	1) Velmi důležité				2) Důležité
	1) Velmi důležité				1) Velmi důležité
	1) Velmi důležité 1) Velmi důležité	1) Velmi důležité 1) Velmi důležité	1) Velmi důležité  1) Velmi důležité		1) Velmi důležité 2) Důležité
	1) Velmi důležité				1) Velmi důležité
	2) Důležité				2) Důležité
1	I) Spolupráce a komunikace s rodiči studentů::14. Do jaké míry považujete následující kompetence za důležité pro učitele přípraveného na praxí?	m) Celoživotní učení se a přizpůsobení se novým situacím a formám učení (např. jako v případě koronakrize)::14. Do jaké míry považujete následující kompetence za důležité pro učitele připraveného na praxi?	n) Sebereflexe vlastní práce::14. Do jaké míry považujete následující kompetence za důležité pro učitele připraveného na praxi?	o) Schopnost zůstat motivovaný a předcházet "burnoutu" (fyzický nebo psychický kolaps způsobený přepracováním nebo stresem):14. Do jaké míry považujete následující kompetence za důležité pro učitele připraveného na praxi?	a) Odborná znalost předmětů a učíva po obsahové stránce::15. Do jaké míry se cítíte připraven/a Vaší institucí (Vaše fakulta/jiná instituce poskytující učitelské vzdělání) v následujících oblastech?
	1) Velmi důležité				3) Spíše nepřipraven/á
	2) Důležité				1) Velmi dobře připraven/á
	1) Velmi důležité	3) Málo důležité			2) Spíše připraven/á
	2) Důležité 2) Důležité				2) Spíše připraven/á
_	1) Velmi důležité	1) Velmi důležité			Spíše připraven/á     Spíše připraven/á
	2) Důležité	1) Velmi důležité			3) Spíše nepřipraven/á
9	3) Málo důležité	2) Důležité	2) Důležité		1) Velmi dobře připraven/á
	2) Důležité	1) Velmi důležité			2) Spíše připraven/á
	1) Velmi důležité	1) Velmi důležité			3) Spíše nepřipraven/á
	1) Velmi důležité	1) Velmi důležité			2) Spíše připraven/á
	1) Velmi důležité 2) Důležité	1) Velmi důležité 1) Velmi důležité			Spíše připraven/á     Spíše připraven/á
	1) Velmi důležité	1) Velmi důležité			2) Spíše připraven/á
	2) Důležité	2) Důležité			1) Velmi dobře připraven/á
	b) Zprostředkování obsahu studentům - schopnost učivo vysvětlovat::15. Do jaké míry se cítite připraven/a Vaši institucí (Vaše fakulta/jiná instituce poskytující učitelské vzdělání) v následujících oblastech?	c) Facilitace výuky - vytváření efektivních příležitosti ve třídě, aby se studenti mohli učit sami a autonomně:15. Do jaké míry se cítřte připraven/a Vaší institucí (Vaše fakulta/jiná instituce poskytující učitelské vzdělání) v následujících oblastech? 4) Zcela nepřípraven/á	d) Využívání informačních technologií ve vzdělávání::15. Do jaké míry se cítíte připraven/a Väší institucí (Väše fakulta/jiná instituce poskytující učitelské vzdělání) v následujících oblastech?  2) Soíše připraven/á	e) Vytváření bezpečného prostředí - předcházení šíkaně, navazování důvěry me dětmi::15. Do jaké míry se cítite připraven, Vaší institucí (Vaše fakulta/jijí ná instituce poskytující učitelské vzdělová oblastech? 2) Spíše připraven/á	/a etnika nebo děti imigrantů)::15. Do jaké m se cítíte připraven/a Vaší institucí (Vaše
_	3) Spíše nepřipraven/á	Spíše nepřipraven/á	Zzela nepřipraven/á	3) Spíše nepřipraven/á	3) Spíše nepřipraven/á
_	L) Velmi dobře připraven/á	Spíše připraven/á	Velmi dobře připraven/á	Spíše připraven/á	4) Zcela nepřipraven/á
	3) Spíše nepřipraven/á	3) Spíše nepřipraven/á	4) Zcela nepřipraven/á	3) Spíše nepřipraven/á	2) Spíše připraven/á
2	2) Spíše připraven/á	4) Zcela nepřipraven/á	2) Spíše připraven/á	4) Zcela nepřipraven/á	4) Zcela nepřipraven/á
	2) Spíše připraven/á	3) Spíše nepřipraven/á	4) Zcela nepřipraven/á	4) Zcela nepřipraven/á	2) Spíše připraven/á
_	3) Spíše nepřipraven/á	2) Spíše připraven/á	2) Spíše připraven/á	2) Spíše připraven/á	3) Spíše nepřipraven/á
	L) Velmi dobře připraven/á	2) Spíše připraven/á	1) Velmi dobře připraven/á	3) Spíše nepřipraven/á	3) Spíše nepřipraven/á
	2) Spíše připraven/á	2) Spíše připraven/á	2) Spíše připraven/á	3) Spíše nepřipraven/á	3) Spíše nepřipraven/á
	2) Spíše připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	2) Spíše připraven/á
	L) Velmi dobře připraven/á	1) Velmi dobře připraven/á	2) Spíše připraven/á	1) Velmi dobře připraven/á	3) Spíše nepřipraven/á
	I) Velmi dobře připraven/á	Spíše připraven/á     Velmi dobře připraven/á	Spíše připraven/á     Spíše připraven/á	Spíše připraven/á     Velmi dobře připraven/á	Spíše připraven/á     Spíše připraven/á
	1) Zcela nepřipraven/á 2) Spíše připraven/á	Spíše připraven/á	2) Spíše připraven/á	Spíše připraven/á	2) Spíše připraven/á
			Spíše pripraven/a     Spíše nepřipraven/á	2) Spíše připraven/á	Spíše připraven/á     Spíše připraven/á
5 1	l) Velmi dobře připraven/á g) Přizpůsobení výuky tak, aby reagovala na	Spíše nepřipraven/á  h) Dávat zpětnou vazbu studentům, aby		i) Zvládání studentů s komnlikovanými nost	oii /
	potřeby všech žáků - i s případnými speciálními potřebami či mírnými handicapy::15. Do jaké míry se cítíte připraven/a Vaší institucí (Vaše fakulta/jiná instituce poskytující učitelské	hodnocení studentům pomáhalo v jejich dalším rozvoji::15. Do jaké míry se cítíte připraven/a Väší institucí (Vaše fakulta/jiná instituce poskytující učitelské vzdělání) v následujících	<ul> <li>i) Vedení studentů k zodpovědnosti za svů vlastní vzdělávací proces a chování:15. Do ja míry se cítíte připraven/a Vaší institucí (Vaš fakulta/jiná instituce poskytující učitelské vzdělání) v následujících oblastech?</li> </ul>	ké vyšší potřebu vnější motivace (například	k) Spoluprace s kolegy – s ostatnimi ucii asistenty pedagoga apod.::15. Do jaké mi cítíte připraven a Vaší institucí (Vaše

1	g) Přizpůsobení výuky tak, aby reagovala na potřeby všech žáků - i s případnými speciálními potřebami či mírnými handicapy::15. Do jaké míry se cítíte připraven/a Vaší institucí (Vaše fakulta/jiná instituce poskytující učitelské vzdělání) v následujících	h) Dávat zpětnou vazbu studentům, aby hodnocení studentům pomáhalo v jejich dalším rozvoji::15. Do jaké míry se cítite připraven/a Vaší institucí (Vaše fakulta/jiná instituce poskytující učitelské vzdělání) v následujících oblastech?	i) Vedení studentů k zodpovědnosti za svůj vlastní vzdělávací proces a chování::15. Do jaké míry se citite připraven/a Vaši institucí (Vaše fakulta/jiná instituce poskytující učitelské vzdělání) v následujících oblastech?	j) Zvládání studentů s komplikovanými postoji / vyšší potřebu vnější motivace (například nedisciplinovanost, problémy s chováním, ztráta motivace v učení)::15. Do jaké míry se cítíte připraven/a Vaší institucí (Vaše fakulta/jiná instituce poskytující učit	k) Spolupráce s kolegy – s ostatními učiteli, asistenty pedagoga apod.::15. Do jaké míry se cítíte připraven/a Vaší institucí (Vaše fakulta/jiná instituce poskytující učitelské vzdělání) v následujících oblastech?
2	3) Spíše nepřipraven/á	2) Spíše připraven/á	4) Zcela nepřipraven/á	4) Zcela nepřipraven/á	2) Spíše připraven/á
3	3) Spíše nepřipraven/á	4) Zcela nepřipraven/á	4) Zcela nepřipraven/á	4) Zcela nepřipraven/á	3) Spíše nepřipraven/á
4	4) Zcela nepřipraven/á	3) Spíše nepřipraven/á	4) Zcela nepřipraven/á	4) Zcela nepřipraven/á	4) Zcela nepřipraven/á
5	3) Spíše nepřipraven/á	4) Zcela nepřipraven/á	3) Spíše nepřipraven/á	3) Spíše nepřipraven/á	3) Spíše nepřipraven/á
6	3) Spíše nepřipraven/á	3) Spíše nepřipraven/á	3) Spíše nepřipraven/á	4) Zcela nepřipraven/á	3) Spíše nepřipraven/á
7	3) Spíše nepřipraven/á	3) Spíše nepřipraven/á	3) Spíše nepřipraven/á	4) Zcela nepřipraven/á	2) Spíše připraven/á
8	2) Spíše připraven/á	2) Spíše připraven/á	1) Velmi dobře připraven/á	2) Spíše připraven/á	1) Velmi dobře připraven/á
9	2) Spíše připraven/á	2) Spíše připraven/á	2) Spíše připraven/á	2) Spíše připraven/á	3) Spíše nepřipraven/á
10	3) Spíše nepřipraven/á	3) Spíše nepřipraven/á	4) Zcela nepřipraven/á	4) Zcela nepřipraven/á	4) Zcela nepřipraven/á
11	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	2) Spíše připraven/á
12	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á
13	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á
14	3) Spíše nepřipraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	2) Spíše připraven/á	1) Velmi dobře připraven/á
15	2) Spíše připraven/á	2) Spíše připraven/á	2) Spíše připraven/á	2) Spíše připraven/á	2) Spíše připraven/á
16	2) Spíše připraven/á	2) Spíše připraven/á	3) Spíše nepřipraven/á	3) Spíše nepřipraven/á	2) Spíše připraven/á

l) Spolupráce a komunikace s rodiči studentů::15. Do jaké míry se cítíte připraven/a Vaší institucí (Vaše fakulta/jiná instituce poskytující učitelské vzdělání) v následujících oblastech?	m) Celoživotní učení se a přizpůsobení se novým situacím a formám učení (např. jako v případě koronakrize)::15. Do jaké míry se cítíte připraven/a Vaší institucí (Vaše fakulta/jiná instituce poskytující učitelské vzdělání) v následujících oblastech?	n) Sebereflexe vlastní práce::15. Do jaké míry se cítíte připraven/a Vaší institucí (Vaše fakulta/jiná instituce poskytující učitelské vzdělání) v následujících oblastech?	o) Schopnost zůstat motivovaný a předcházet "Burnoutu" (fyzický nebo psychický kolaps způsobený přepracováním nebo stresem)::15. Do jaké míry se cítíte připraven/a Vaší institucí (Vaše fakulta/jiná instituce poskytující učitelské vzdělání) v následujících
2 4) Zcela nepřipraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	4) Zcela nepřipraven/á
3 3) Spíše nepřipraven/á	4) Zcela nepřipraven/á	3) Spíše nepřipraven/á	4) Zcela nepřipraven/á
4 3) Spíše nepřipraven/á	4) Zcela nepřipraven/á	3) Spíše nepřipraven/á	3) Spíše nepřipraven/á
5 4) Zcela nepřipraven/á	4) Zcela nepřipraven/á	3) Spíše nepřipraven/á	4) Zcela nepřipraven/á
6 4) Zcela nepřipraven/á	4) Zcela nepřipraven/á	4) Zcela nepřipraven/á	4) Zcela nepřipraven/á
7 4) Zcela nepřipraven/á	3) Spíše nepřipraven/á	2) Spíše připraven/á	4) Zcela nepřipraven/á
8 2) Spíše připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	2) Spíše připraven/á
9 2) Spíše připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	3) Spíše nepřipraven/á
10 4) Zcela nepřipraven/á	1) Velmi dobře připraven/á	2) Spíše připraven/á	4) Zcela nepřipraven/á
11 2) Spíše připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á
12 1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	2) Spíše připraven/á
13 1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á
14 2) Spíše připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á	1) Velmi dobře připraven/á
15 2) Spíše připraven/á	2) Spíše připraven/á	2) Spíše připraven/á	2) Spíše připraven/á
16 3) Spíše nepřipraven/á	3) Spíše nepřipraven/á	2) Spíše připraven/á	3) Spíše nepřipraven/á