INNOVATIVE PRACTICES & QUALITY ASSURANCE IN INITIAL TEACHER EDUCATION

albas

Edited by:
Kätlin Vanari, Fjolla Kaçaniku, Eve Eisenschmidt, Blerim Saqipi

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Introduction

In the evolving landscape of education, the pursuit of quality has become paramount. It is not a concept confined to the realms of higher education or teacher education alone; rather, it has emerged as a societal concern of great significance, extending its reach into various sectors such as industry, healthcare, and, of course, education.

This book embarks on a journey to explore the multifaceted dimension of quality within the sphere of initial teacher education. While our primary focus remains on the quality of initial teacher education, it is essential to recognise that this formative phase of teacher development occurs within higher education institutions. Therefore, the book's exploration extends beyond the boundaries of initial teacher education, delving into the intricate landscape of quality in higher education as a foundational context.

Quality in initial teacher education is inextricably linked to the broader context of educational quality. However, this book does not directly delve into this expansive dimension. The complexities of this topic extend beyond the scope of our research. Instead, we address this facet by examining the advancement of the education profession and how institutions providing initial teacher education have adapted to their new roles in preparing high-quality future teachers.

The overarching aim of this book is to dissect and disseminate the mechanisms of quality assurance and the innovative practices that can enhance the capacity of initial teacher education institutions in Kosovo and European Union partner institutions. It aspires to go beyond the surface and delve deep into the core mechanisms that govern the quality assurance processes in initial teacher education.

Within the context of Kosovo, where educational development is of paramount importance, this book aims to uncover the nuances and complexities of quality assurance within teacher education. By doing so, it seeks to offer valuable guidance and recommendations that can be instrumental in raising the standards for quality teacher preparation.

Furthermore, the book extends its reach to European Union partner institutions, recognising the importance of collaboration and exchange of best practices in the field of teacher education. It sheds light on innovative approaches

and practices that have proven successful in enhancing the capabilities of these partner institutions. By disseminating these innovative practices, the book intends to foster a sense of synergy and mutual growth among these institutions, ultimately contributing to the advancement of teacher education across Europe.

The preparation and publication of the book was supported by the project 'Towards a quality oriented system of initial teacher education to increase teacher professionalism in Kosovo / QATEK', co-funded by the ERASMUS+ Programme of the European Union. The wider objective of this three-year project was to develop a quality culture in initial teacher education institutions that produces enhanced teacher professionalism in the Kosovo school systemm while the project's specific objectives followed: 1) introducing a comprehensive internal quality assurance system in initial teacher education institutions, 2) developing capacities of initial teacher education to manage a quality assurance system that is oriented towards quality and producing intended teacher professionalism, and 3) redesigning teacher education courses to reflect a new teaching professionalism on the part of teachers.

In line with project outcomes, a call for papers was prepared in May 2022 and welcomed articles from project partner universities in three thematic areas relevant to the project. The first area, titled 'Quality assurance - culture and policy in initial teacher education institutions', focused on quality assurance practices at the institutional level. Topics in this area include quality assurance in initial teacher education, organisational culture, quality culture, strategic planning, leadership and management approaches, and internal teacher education policies. The second thematic area, titled 'Teacher education programs for the future competences of the teacher', focused on quality-oriented teacher education programmes and their orientation (academic, competence-based, conceptualisation of initial teacher education programmes, modules, etc.). Topics related to the development of specific competencies of student-teachers (e.g., specific courses, aspects, including research competence) are included. The third thematic area, 'Professional development of the teacher educator', focused on the quality assurance practices of teacher educators. It covers topics related to teacher educator teaching and learning practice, teacher educator continuous professional development and learning, teacher educator (as teacher and/or researcher), and teacher educator identity.

The book aims to accomplish the goal set by the call for papers by compiling studies that employ various methodologies, all of which are focused on tackling the challenges associated with quality-oriented initial teacher education in diverse settings. The studies collected in this book were developed in different countries and are informed by a variety of philosophical traditions so that the lessons learned should acknowledge the contextual nature of the findings and consider the multiple facets of quality initial teacher education.

The first section of the book is devoted to teacher education programmes and the competencies of future educators. In this section, we delve into the quality of teacher education by considering elements such as programme philosophy, purpose, structure, content, and goals, as well as notions of teacher quality and professionalism. Essentially, our aim is to explore the underlying conceptual frameworks, assumptions, and policy measures that these programmes embody for quality teacher education. As we navigate this complex set of variables shaping the quality of teacher education programmes, four chapters provide valuable insights and perspectives.

In Chapter 1, Blerta Perolli-Shehu, Eve Eisenschmidt, and Fjolla Kaçaniku shed light on the current practices of teacher education in Kosovo concerning the envisioned teacher professionalism. This chapter makes a valuable contribution by examining the evolving landscape of teacher education in Kosovo over the previous decade and its impact on teacher professionalism and competence. It delves into the reforms necessitated by quality concerns, which have led to changes in teacher education programmes aimed at enhancing teachers' knowledge, skills, and values. Using a three-level approach based on the EU framework for teacher competencies, it evaluates the alignment between programme design and delivery, identifying areas for improvement. Findings highlight a focus on knowledge development, limited attention to pedagogical knowledge, and a lack of emphasis on desirable skills and values. The chapter underscores the importance of capacity building for teacher educators and addressing pedagogical gaps in their background, offering practical insights for programme enhancement.

In Chapter 2, Janez Vogrinc, Blerim Saqipi, and Miha Matjašič analyse the enhancement of teacher education quality through research-based curricula and practices. The findings in this chapter reveal valuable insights into the perceptions of student-teachers regarding their research knowledge, skills, and attitudes. It becomes evident that student-teachers generally consider themselves to have a substantial level of research knowledge and skills, and they hold a positive

attitude toward research. Furthermore, a significant observation is that the inclusion of research-based curricula has a substantial predictive influence on enhancing research knowledge, skills, and attitudes among student-teachers. This study, in essence, contributes significantly to our comprehension of research competence and underscores the advantages of incorporating research-based curricula within teacher education towards improving its quality.

In Chapter 3, Gabriella Agrusti, Valeria Damiani, and Blerim Saqipi explore the beliefs and attitudes toward democracy held by future primary school teachers, comparing initial teacher education in Italy and Kosovo. Teachers' responsibilities and professionalism have changed as a result of changes in the field, as well as in response to sociological, technical, and globalisation trends. A variety of benchmarking procedures have developed at the European level as a result of this setting. On a programmatic level, institutions of teacher education have struggled to address and accommodate general notions, including soft skills and competences like citizenship, democracy, and broader ideals. Programmes for student-teachers and the professional development of future educators are seen in this phase as having a significant influence on the calibre of instructional activities and instructors' professionalism. This chapter investigates future teachers' opinions as they relate to their initial teacher education (ITE) in the two nations.

Chapter 4, authored by Majlinda Gjelaj, Rozafa Ferizi Shala, Laura Rozman Krivec, and Sanja Bercnik, provides mentor teachers' perspectives on the qualities of student teachers' skills and attitudes toward the early childhood educator profession, contextualising their experiences in Kosovo and Slovenia. This chapter focuses on mentor teachers' evaluations of student teachers' attitudes and performance during pedagogical practice. Mentor teachers expressed overall satisfaction with student teachers' engagement but highlighted areas for improvement, particularly in activity management and self-reflection skills. They highly value the impact of student teachers' pedagogical practice and recommend extending practice periods in teacher education. This emphasises the importance of collaboration with mentor teachers to enhance the quality of teacher education through valuable feedback.

The second part of the book focuses on teacher educators' continuous professional development. In this section, we investigate teacher educators' identity and professional development practices within the context of enhancing the quality of initial teacher education. These chapters examine how teacher educa-

tors respond to initiatives aimed at elevating the quality of initial teacher education, and they present three thought-provoking chapters on this subject.

In Chapter 5, Laura Naka describes the role of pedagogical practice in initial teacher education. The chapter's key contribution lies in utilising respondent data to address challenges encountered during pedagogical practice and offer recommendations for potential policy adjustments. In summary, while students may feel adequately prepared for teaching through lectures, their pedagogical practice experiences expose them to unpredictable classroom situations. Thus, pedagogical practice plays a crucial role in fortifying student-teachers in their profession, underscoring its significance.

Chapter 6, authored by Matej Vošnjak, Janez Vogrinc, Iztok Devetak and Miha Matjašič, explores the challenges of shaping the identity of STEAM (Science, Technology, Engineering, Arts, and Mathematics) teacher educators. The chapter's significant finding is the recommendation that teacher educators need to enhance their professional and pedagogical skills to effectively support students in achieving their learning objectives. Notably, many of these teacher educators lack experience with the STEAM approach and have not received programmes or courses related to STEAM education. This research highlights the growing desire to equip teacher educators with STEAM competencies, particularly for those teaching STEAM subjects, enabling them to effectively impart these competencies to their students.

In Chapter 7, Janez Krek and Tatjana Hodnik examine the transmission of knowledge within the constructivist framework and elaborate on the evolving role of teachers in the process. This chapter makes a significant scientific contribution by challenging the prevailing notion in pedagogy that modern teaching involves the teacher's withdrawal as a mere conduit between content and students. It highlights the misconception that applying predetermined methods, regardless of context or objectives, is inherently 'progressive' teaching. Instead, the chapter argues that, especially in the context of teaching mathematics, the teacher's role as a facilitator of knowledge construction aligns with constructivist theory. It refutes the idea of a 'new teacher role' that removes the teacher as a knowledge mediator, emphasising the instructional role of the teacher. Ultimately, the chapter stresses the importance of the teacher's active involvement in teaching to maintain authority and positively impact students' knowledge and attitudes.

The final section of the book delves into the culture and policies of quality assurance in initial teacher education institutions. The last section focuses on enhancing the quality of initial teacher education at the policy and institutional levels. Within this section, we explore the interplay between structural and managerial aspects, as well as cultural and psychological elements, in efforts to address quality in initial teacher education. The contribution also focuses on the idea that the improvement of quality in initial teacher education is shaped not only by management practices but also by variables related to organisational culture. Therefore, it is crucial to examine how institutions engage with and adapt quality assurance policies and practices as part of their efforts to enhance the quality of initial teacher education institutions.

Chapter 8, authored by Kätlin Vanari and Fjolla Kaçaniku, analyses the diverse paths of quality assurance policies and practices in Estonian and Kosovan initial teacher education. The chapter's noteworthy contribution lies in the comparison of the evolving quality assurance systems in Estonia and Kosovo despite their distinct developmental paths. It highlights the common challenge of finding effective tools to empower academics in both nations. To further the development of a quality culture in initial teacher education, the chapter supports the importance of striking a more harmonious balance between quality assurance and quality enhancement.

This book serves as a comprehensive resource that not only dissects quality assurance policies and practices in teacher education but also serves as a connecting link between Kosovo and European Union partner institutions. Its overarching aim was to empower these institutions with the knowledge and insights needed to continuously improve and innovate in their quest to provide high-quality teacher education, ultimately benefiting various stakeholders in diverse teacher education contexts.

From a research perspective, the book makes a significant scientific contribution by offering a comprehensive exploration of quality assurance mechanisms and innovative practices within the domain of initial teacher education. It synthesises studies from various countries and philosophical traditions, providing a rich and diverse dataset for future research and scholarly inquiry. By addressing the complex landscape of quality in initial teacher education, the book lays the foundation for further academic investigations into the contextual nature of findings and the multifaceted aspects of quality in initial teacher education.
From a practical standpoint, this book serves as a valuable resource for initial

teacher education institutions, teacher educators, policymakers, and practitioners. It offers insights into effective practices and quality assurance mechanisms that can enhance the capacity of initial teacher education institutions in transitioning countries.Readers can gain valuable perspectives on quality teacher education programmes and future teacher competencies, while also delving into the professional development of teacher educators.

Additionally, the examination of quality assurance culture and policies provides practical guidance for improving the quality of teacher education within different institutional contexts. Ultimately, this book bridges the gap between research and practice, offering tangible strategies to elevate the quality of initial teacher education.

Editors
Prishtinë, 2023

Chapter 1 : Current practices of teacher education in Kosovo in light of the intended teacher professionalism

Blerta Perolli Shehu, Eve Eisenschmidt, Fjolla Kaçaniku

Abstract

Changes in teacher education practices in Kosovo have been frequent and have undoubtedly affected teacher professionalism and teacher competence development for the last decade. In response to quality concerns, reform policies have been developed over the years requiring changes in teacher education programmes to guide the development of knowledge, skills and dispositions that teachers are expected to reflect in their pedagogical practice better. This chapter analyses the current teacher education programmes using the EU framework for supporting teacher competence development following a three-level approach, namely knowledge and understanding, skills and dispositions, focusing on both the content of the programmes as well as the way teacher educators deliver their courses by identifying the main changes that need to be aspired through capacity building and course revision activities. The chapter presents findings from a study conducted following a qualitative method design, using document review and focus group interviews with teacher educators as data collection tools to evaluate the alignment between written programmes and implemented programmes and to discuss areas of improvement. Altogether, four primary teacher education programmes were included in the study. The study found that knowledge development is the priority in teacher education programmes, with skills mainly being developed during pedagogical practice. The majority of courses focus on subject knowledge, with limited pedagogical knowledge. In terms of dispositions, this was the most ignored part when laying out learning outcomes. Dispositions to change, flexibility, collaboration, and networking are hardly visible in the learning outcomes in most universities. Teacher educators addressed the need for the capacity building and professional development of teacher educators for improving teaching methodology, research, and others. Moreover, the need to address the limited pedagogical background of teacher educators was highlighted.

Keywords: teacher education programmes, competence-based TE, quality assurance, programme improvement

1. Introduction

The fundamental role of teacher education is to develop the essential characteristics that define teacher professionalism. The teacher education reform in the last decade has shifted the universities' aims from providing future teachers with the knowledge that they are expected to apply later to focusing on competence development for students to obtain knowledge by themselves and to work in ways that enable them to come up with new ideas (Neesipbayeva, 2012). 'Teacher education' refers to the policies and procedures designed to equip prospective teachers with the knowledge, attitudes, behaviours, and skills they require to perform their tasks effectively in the classroom, school, and wider community.

All changes to teacher education programmes and practices contribute to consequences on education as a discipline at all levels. Kosovo has undergone very frequent changes to teacher education programmes, especially in the last decade, that have had key influences on student learning. Most of these changes happened over three-, eventually four-year periods as part of the regular accreditation processes, without any proper analysis or evaluation of how existing programmes were performing or what competences they were addressing. Among the many changes and challenges that teacher education programmes were facing over the years, there was seemingly also a lack of consensus among policy- and decision-makers on what the most important issues in teacher education are and what is actually required to change to ensure competence development and a continuum of teacher learning and teacher education.

The new Kosovo Curriculum Frameworks launched in 2011 (MESTI, 2016) emphasises competence-based teaching and learning, shifts the focus from acquiring knowledge to building competences, and fosters a transition for teaching and learning based on objectives and teaching content to a more contemporary methodology of teaching and learning based on results and development of competencies in children.

The implementation of this curriculum framework requires that initial teacher education programmes support the education and development of prospective teachers who respond to this and similar curriculum reforms. The importance of initial teacher education programmes is stressed for their facilitative role in terms of preparing teacher candidates for the complex realities of their future classroom (Simon, 2013). Teacher competences are a major factor that impacts student learning (Peklaj, 2015). Competencies are the requirements of a 'com-

petency-based' teacher education and include the knowledge, skills, and values a student-teacher must demonstrate for successful completion of an initial teacher education programme (Neesipbayeva, 2012).

In 2018, Kosovo participated in the Programme for International Student Assessment (hereinafter: PISA test), which assesses the abilities of 15-year-old students to apply knowledge from reading, mathematics, and science to everyday life; the majority scored below the average of OECD countries. In 2018, the results of Kosovo student achievement in mathematics and reading were minimally better than in 2015 (OECD, 2018), while the results in the field of sciences had worsened, confirming once again that the state of education in Kosovo is a matter of concern.

Amongst the various issues influencing the quality of education, it is commonly known that teachers play a critical role; it is even argued that teacher competences are the dominant school-based factor influencing academic achievements. Research using sophisticated statistical techniques indicates that teaching expertise accounts for about 30 per cent of the variance in student achievement (Hattie, 2003). Nye, Konstantopoulos, and Hedges (2004) estimated that teacher quality can explain between 7 and 21 per cent of variance in student achievement (Peklaj, 2015). The PISA results exerted enormous public pressure on teachers and on teacher education programmes, prompting expectations that teachers are required to have the competencies to foster positive learning environments and promote the development of key competencies in students in the knowledge society. Thus, the need to continue moving beyond the provision of information to fostering an adequate environment for the inclusion and development of key competences is present. In order to do this and develop optimal learning environments for students, teachers have to develop complex instructional, classroom management, communication and assessment competencies so as to facilitate students' cognitive, affective and social processes (Peklaj, 2015).

2. Initial Teacher Education and Teacher Professional Development in Kosovo

Teacher education and teacher professional development remain key priorities of the education system in Kosovo. Currently, teacher education is organised in five public higher education institutions through Faculties of Education. The Law on Pre-university Education in Kosovo (2011) and the Law on Higher Education in Kosovo (2012) define the institutions responsible for teacher education in pre-university education. Pre-primary and primary teacher education programmes are offered in all five public universities, and the required duration of studies to prepare teachers of pre-primary and primary education is at least four years (240 ECTS). Subject teaching is offered only at the University of Prishtina. The duration of studies to prepare subject teachers is at least 300 ECTS, out of which at least 180 ECTS are required for the academic component (BA level) and 120 ECTS (MA level) for the pedagogical and practical component.

Teacher education in Kosovo operates within the national external accreditation system for higher education.The Kosovo accreditation standards for external quality assurance are based on the European Standards and Guidelines for Quality Assurance. They are implemented regularly, and higher education institutions plan developments based on those standards. They are generic and do not address specific themes. The external accreditation process is applied based on the quality assurance approach or the fulfilment of minimum quality criteria as defined in local legislation. Despite the fact that the accreditation process has significantly influenced the improvement of quality in institutions of higher education, the quality assurance system has not yet matured to the extent of implementing a system based on the quality enhancement approach or quality culture as it happens in the developed countries of Europe (Kaçaniku, 2020, 2022). Higher education institutions are also expected to develop their own internal mechanisms to respond to those external standards. The internal quality assurance system continues to remain one of its weak points in institutions of higher education in Kosovo, which is also reflected in the quality of teaching.

Teacher education programmes in Kosovo are also required to comply with the professional standards defined by the Strategic Framework on Teacher Development and Curriculum Framework/Core Curriculum for the respective level (Saqipi, 2019). The Strategic Framework for Teacher Development in Kosovo (Ministry of Education Science and Technology/MEST, 2017) defines the standards of the profession, which serve as a reference for teacher preparation, pro-

fessional support and development, performance assessment, and promotion of teachers. Teachers' professional standards are organised in four teaching areas and correspond to standards for teachers (see Table 1 for detailed information).

Table 1. General framework of standards of the teaching profession / general competencies (MESTI, 2017)

Teaching areas	Standards for teachers
Professional values, attitudes, and behaviour	Recognises and supports key values and criteria defined by the MEST/Responsibility towards work duties and obligations
Professional knowledge and understanding	Demonstrates positive and objective attitudes and behaviour for the well-being of students and teaching Demonstrates knowledge of curriculum/subject content and professional didactic methodology for the subject
Skills and professional practice	Plans effective implementation of teaching and learning Plans continuous assessment (assessment to learn), offers feedback and reports in regards to student learning
Professional learning and engagement	Engages in continuous professional development. Engages professionally with colleagues, parents and community

The strategic framework for teacher development sets the standards of the teaching profession throughout the career (pre-service, entry phase in the profession and professional development) and specifies teacher competencies in different teacher development phases in an effort to improve the organisation of the teacher development system and aims at offering a coherent career plan for teacher development in Kosovo and ensure that all students are inspired to learn from devoted teachers, who are efficient and careful towards their students (MEST, 2017, p. 10).

Teaching competences are complex combinations of knowledge, skills, understanding, values and attitudes, leading to effective action in situations. Since teaching is much more than a task and involves values or assumptions concerning education, learning and society, the concept of teacher competences may resonate differently in different contexts (Caena, 2011, 2014). Teachers' competences need to be set in the wider context of the European framework to ensure that all future teachers in Kosovo have the competences (knowledge, skills, and attitudes) they require for teaching in the 21st century. Teacher education programmes need to develop future teachers who constantly innovate and adapt, including teachers who have critical, evidence-based attitudes, which enable them to respond to student outcomes with new evidence from inside and outside the classroom, as well as professional dialogue, in order to adapt their own practices. However, producing competent and well-equipped student-teachers in teacher education programmes in itself is not sufficient for longer-term success.

Initial teacher education may create awareness, but how to cope with the realities in the teaching context mainly depends on the in-service professional development they take (Atmaca, 2017). In Kosovo, despite the current applicable legal and policy framework, the current level of implementation of the licensing system for teachers does not allow for professional advancement and does not ensure teacher promotion in the career system. The teacher professional development component continues to be challenging, as is the assessment of teacher performance. Based on the Kosovo Education Strategy 2022–2026, the interest and involvement of teachers in professional development have continuously decreased over the years due to a lack of funding and failure to implement the teacher licensing system. In-service teacher professional development is the responsibility of several institutions that have a role in in-service teacher professional development, which offer professional development courses and work towards the professional development of teachers. Each of them has its own definition of quality and way of operation. They are also diversified significantly in content, duration, and assessment criteria and are delivered at different academic levels. Despite initiatives to define public institutions that would have the leading role for certain teacher professional development programmes, the Ministry of Education, Science, and Technology (MESTI) was not successful in that and, as a result, the teacher professional development mainly depends on international projects financed by donors (KEEN, 2019).

3. Competence-based Teacher Education

Teacher competence is one way of looking at the quality of teachers and the quality of education provided in the classrooms. The extended complexities of the teaching profession indicate the need to develop a shared understanding of initial teacher education. Teachers should have both pedagogical knowledge and content knowledge, as well as pedagogical content knowledge (Shulman, 1986), the ability to apply acquired knowledge, and the willingness to learn from experience, accompanied by the commitment and motivation to teach (Simons & Ruijters, 2014).

The roles and realities of teachers' worlds and works are changing, and so are expectations about them: teachers are asked to teach in increasingly diverse classrooms, integrate students with special needs, use ICT for teaching effectively, engage in evaluation and accountability processes, and involve parents in schools (Fullan, 2007; Day & Gu 2010; Day, 2017). Many reforms in teacher education programmes are oriented towards building competences that teachers need in practice. According to Caena (2011), EU priorities for improving teacher quality and teacher education (as defined in the Conclusions of the Education Council 2007, 2008, 2009) recall the need to improve teacher competencies, as well as to promote professional values and attitudes, mentioning examples such as specialist knowledge of subjects, pedagogical skills and attitudes of reflective practice, innovation, research, collaboration, and autonomous learning as important teacher requirements. The Common European Principles of Teacher Competences and Qualifications classifies three broad areas of competence, namely working with others, working with knowledge, technology, and information, and working in and with society. Day (2017) noted that teachers need to help students acquire not only the skills that are easiest to teach and easiest to test but, more importantly, ways of thinking (i.e., creativity, critical thinking, problem-solving, decision-making, and learning), ways of working (i.e., communication and collaboration), tools for working (i.e., including information and communications technologies), and skills around citizenship, life and career and personal and social responsibility for success in modern democracies. The European Commission Communication Improving the Quality of Teacher Education stresses that teachers need a key role as facilitators in promoting autonomous learning and key competences development through collaborative and individualised approaches, taking on management and decision-making roles (Caena, 2011).

Hargreaves (2003, p. 24) argues that teachers need to develop a new professionalism by which they promote deep cognitive learning, learn to teach in ways they were not taught, commit to continuous professional learning, work and learn in collegial teams, treat parents as partners in learning, develop and draw on collective intelligence, build capacity for change and risk, and foster trust in process. Teachers are expected to be 'learning professionals' who constantly expand their knowledge and skills and share both practical and theoretical insights in a community of colleagues (Pedaste et al., 2019). Furthermore, Hattie (2009, pp. 238–239) provides indications that show the complexities of teachers' new roles:

- Teachers are among the most powerful influences in learning,
- Teachers need to be directive, influential, caring, and actively engaged in the passion of teaching and learning,
- Teachers need to be aware of what each and every student is thinking and knowing, to construct meaning and meaningful experiences in light of this knowledge, and have proficient knowledge and understanding of their content to provide meaningful and appropriate feedback such that each student moves progressively through the curriculum levels,
- Teachers need to know the learning intentions and success criteria of their lessons, know how well they are attaining these criteria for all students, and know where to go next in light of the gap between students' current knowledge and understanding and the success criteria of: 'Where are you going?', 'How are you going?', and 'Where to next?';
- Teachers need to move from the single idea to multiple ideas and to relate and then extend these ideas such that learners construct and reconstruct knowledge and ideas. It is not the knowledge or ideas but the learner's construction of this knowledge and these ideas that is critical;
- School leaders and teachers need to create school, staffroom, and classroom environments where error is welcomed as a learning opportunity, where discarding incorrect knowledge and understanding is welcomed, and where participants can feel safe to learn, re-learn, and explore knowledge and understanding.

The European Commission (2013) document Supporting teacher competence development for better learning outcomes outlines new teacher professionalism by distinguishing teachers equipped with the ability to integrate knowledge, handle complexity, and adapt to the needs of individual learners as well as groups. In this context, teacher competences are built on a concept of teaching

as praxis in which theory, practice, and the ability to reflect critically on one's own and others' practice illuminate each other, rather than on a concept of teaching as the acquisition of technical skills. Table 2 below outlines the framework for planning curriculum improvement and development.

Table 2. Framework for planning curriculum improvement and development (EU framework supporting teacher competence development)

Categories	Competence area
Knowledge & understanding	Subject matter knowledge
	Pedagogical Content Knowledge (PCK), implying deep knowledge about content and structure of subject matter: -knowledge of tasks, learning contexts and objectives - knowledge of students' prior knowledge and recurrent, subject-specific learning difficulties - strategic knowledge of instructional methods and curricular Materials
	Pedagogical knowledge (knowledge of teaching and learning processes)
	Curricular knowledge (knowledge of subject curricula, e.g., the planned and guided learning of subject-specific contents)
	Educational sciences foundations (intercultural, historical, philosophical, psychological, sociological knowledge)
	Contextual, institutional, organisational aspects of educational policies

	Issues of inclusion and diversity
	Effective use of technologies in learning
	Developmental psychology Group processes and dynamics, learning theories, motivational issues
	Evaluation and assessment processes and methods
Skills	Planning, managing and coordinating teaching
	Using teaching materials and technologies
	Managing students and groups
	Monitoring, adapting, and assessing teaching/learning objectives and processes
	Collecting, analysing, interpreting evidence and data (school learning outcomes, external assessment results) for professional decisions and teaching/learning improvement; Using, developing, and creating research knowledge to inform practices
	Collaborating with colleagues, parents, and social services
	Negotiation skills (social and political interactions with multiple educational stakeholders, actors, and contexts)

	Reflective, metacognitive, interpersonal skills for learning individually and in professional communities
	Adapting to educational contexts characterised by multi-level dynamics with cross-influences (from the macro level of government policies to the meso-level of school contexts and the micro level of classroom and student dynamics)
Dispositions: beliefs, attitudes, values, commitment	Epistemological awareness (issues concerning features and historical development of subject area and its status, as related to other subject areas)
	Teaching skills through content
	Transferable skills
	Dispositions to change, flexibility, ongoing learning, and professional improvement, including study and research
	Commitment to promoting the learning of all students
	Dispositions to promote students' democratic attitudes and practices as European citizens (including appreciation of diversity and multiculturality)
	Critical attitudes to one's own teaching (examining, discussing, questioning practices)
	Dispositions to team-working, collaboration, and networking
	Sense of self-efficacy

4. Methodological approach

The aim of this analysis was to conduct a feasibility study/situation analysis on the current practices of teacher education in light of the intended teacher professionalism to determine the current status of the way teacher educators deliver their courses by identifying the main changes that need to be aspired through capacity building and course revision activities. The study used the framework for planning curriculum improvement and development (EU Framework For Supporting Teacher Competence Development) as a guiding document for the analysis. The study follows a qualitative approach to explore the design and delivery of teacher education programmes better in light of achieving the intended teacher competences. Through qualitative approaches, the authors are more able to analyse the perspectives and understanding of teacher educators, bearing in mind the contextual actors and the uniqueness of the situations being studied (Gay et al., 2006). Moreover, while statistical data may be more reliable, analysing understandings or current implementation can be challenging. As such, the present study aimed to gain a better picture of the situation and deepen the understanding of subjective experiences rather than testing hypotheses. The findings are extracted from data collected through programme document analysis and exploring teacher educators' views, understanding and attitudes. Focus group discussions using semi-structured questions were used to obtain the data.

The methodology of the analysis followed three steps. The first step was to analyse the current initial teacher education programmes from two aspects: 1) content-wise and 2) process-wise based on the EU framework for supporting teacher competence development- the competences of teachers: perspectives from research and policy (Darling-Hammond & Bransford, 2005). The analysis of the programme followed a three-level approach:

1. Knowledge and understanding part of the competences focusing on programme content, listing relevant courses and learning outcomes based on documents;
2. Skills part of the competences focusing on the teaching and learning process of the programme, including pedagogical practices in the lectures, assessment tasks for students, independent course works, practical tasks, pedagogical practice process based on teacher/educator group discussions and course description;
3. Dispositions: beliefs, attitudes, values, commitment part of the competences focusing on both content and process based on both documents and teacher educators' reflections.

This analysis was carried out by involving teacher educators and student-teacher representatives from participating initial teacher education institutions.
The second step involved focus group interviews with teacher educators to evaluate the alignment between written programmes and implemented programmes and to discuss areas of improvement. The third and final step in the analysis was to address preliminary areas of improvement, which is the basis for programme leaders for joint discussions to map areas of improvement and plan further development steps.

4.1 Data collection

Data were collected from programme documents and focus group interviews. Four primary teacher education programmes (University of Prishtina 'Hasan Prishtina', University of Gjilan 'Kadri Zeka', University of Mitrovica 'Isa Boletini' and University of Gjakova 'Fehmi Agani') and one master programme (University of Pristina) were analysed for the study. All participating institutions were the partners in the project 'Towards a quality-oriented system of initial teacher education to increase teacher professionalism in Kosovo' (hereinafter QATEK), co-funded by the Erasmus+ Programme. A total of 14 teacher educators from all four primary education teaching programmes participated in the focus group interviews, among which two were vice-rectors, two vice-deans, two heads of programmes and other academic staff- professors and teaching assistants.

The study was initially based on analysing the curricular programme and individual syllabuses from both faculties. The information from the review of this documentation was analysed using the content analysis method. The purpose of content analysis is to organise and elicit meaning from the data collected and to draw realistic conclusions from it (Bengtsson, 2016). Content analysis is an approach involving systematic, rule-guided qualitative text analysis that attempts to preserve the methodological strengths of quantitative content analysis and widen them to a concept of qualitative procedure (Mayring, 2000).

The team analysed how each curriculum is currently structured and what percentage is dedicated to content such as pedagogy, psychology, practice, and similar. The documents used as data sources for the first step of the analysis were programme self-evaluation reports, programme outlines, course descriptions and syllabuses and assessment practices in the classroom. An instrument for document review was designed based on the EU framework for supporting teacher competence development. The analysis focused on programme

level, not course level, to examine specifically how these programmes addressed teacher competences, namely in knowledge and understanding, skills and dispositions, throughout a four-year period of the implementation of a teacher education programme.

The results were analysed and interpreted based on the thematic analysis method, which is a method for analysing qualitative data that entails searching across a data set to identify, analyse, and report repeated patterns (Braun & Clarke, 2006). It is a method for describing data but also involves interpretation in the processes of selecting codes and constructing themes.

4.2 Content analysis of primary teacher education programme at faculties of education in Kosovo

A review of primary teacher education programmes at the faculties of education in Kosovo reveals that, although the programmes differ structurally in terms of distribution and delivery of the course, the basic purpose and intended outcomes of the programmes are similar: to prepare future teachers, who are competent in applying educational theories in everyday practice, to think critically and creatively as well as to develop practical skills to help children in their academic learning as well as in their physical, cognitive, emotional and social development.

Structurally speaking, the programmes for preparing teachers in Kosovo differ in the percentage dedicated to macro-topics such as pedagogy, psychology, practice, subject matter knowledge, etc. The primary education programme in Pristina has allocated a larger percentage of the courses to topics in the fields of pedagogy, psychology, and general education in comparison to other programmes. This percentage covers the pedagogical practice as well. The percentage of courses dedicated to disciplinary subject content such as Albanian language and literature, mathematics, history, social and natural sciences, etc., ranges from 47% to 58%, and around 7%-11% (in Prishtina) of the courses are interdisciplinary. The analysis indicated that in most programmes, a large percentage of the programmes are dedicated to academic, subject content knowledge rather than to methodological approaches on how to transfer such knowledge and skills to children.

The current primary education programmes were also analysed content-wise. The analysis is based on the aspects of teacher competence laid out in the EU framework for supporting teacher competence development (European Commission, 2013). The framework breaks down teacher competences into three separate areas and components for more in-depth analysis and a better understanding of implications. Consequently, the analysis of the programmes was broken down into the suggested three areas of competence. The first area includes the knowledge and understanding part of the competences focusing on programme content and learning outcomes. The second area covers the skills part of the competences, focusing on the teaching and learning process of the programme. Finally, the third area covers the beliefs, attitudes, and values, focusing on both content and process-based document review. The findings are presented in three levels below:

Knowledge and Understanding: The analyses revealed that primary education programmes generally cover in-depth subject matter knowledge in Languages, Math, Natural and Social Sciences, and Arts. The learning outcomes are mostly oriented towards subject and content knowledge (with subject knowledge taking priority) and are organised so that students undertake subject-knowledge courses first and then move on to pedagogical content knowledge. Pedagogical content knowledge is mainly expressed through methodology courses. Pedagogical knowledge, combined with curricular knowledge and educational sciences foundations, is cross-cutting in several courses. Sometimes, the same or very similar content is provided in different courses. Less space is provided for the use of technology in learning, issues of inclusion and diversity, and organisational aspects of education policies. The application of policies to practice is not visibly covered by courses in the primary education programme. Group processes and dynamics, learning theories, and motivational issues remain at the margin of programme content and implementation. It was also mentioned that the majority of courses focus on gaining knowledge and information. This is easily visible when looking at the learning outcomes for individual courses, which usually start with 'acquire knowledge on...' or 'develop an understanding of...'. The new curricular framework in Kosovo for pre-university education, with its focus on competence-based teaching and learning, shifts the focus of the education system from pure knowledge acquisition to the competences that students need to succeed in life. However, this seems to not have been properly reflected in the teacher education programmes, as the majority of the (around 70%) focus on subject knowledge, with more limited pedagogical and psychological content knowledge.

Skills: The analysis also revealed that not all courses contain aspects of skills development. A limited number of courses include skills acquisition as one of their learning outcomes. Most of the courses focus only on knowledge acquisition, and this is reflected both in their learning outcomes (gain understanding, acquire knowledge, etc.) as well as teaching methodologies (traditional lecturing with limited practical sessions). The development of skills is less visible in the course descriptions and outcomes, making it more difficult to assess how much effort is dedicated to it. There seems to be more effort provided to aspects of planning, managing, and coordinating teaching as well as managing students and groups, and less effort provided to developing skills for adapting and assessing objectives and processes, conducting research, and using research knowledge to inform practices. The development of research skills is only visible in course descriptions in the last year of study in half of the faculties participating in the study. Furthermore, only one or two courses focus on communication and negotiation skills and other interpersonal skills, including collaboration with colleagues, parents, or other service providers. A more hands-on approach is required to assess the focus on skills development through in-class observations and interviews with course instructors. The need to bridge theory and practice for skills development is considered a priority for all faculties.

Dispositions: beliefs, attitudes, values, commitment: Similar to skills development, establishing how much effort is provided to the formation of values and attitudes proved to be a very difficult task using this approach. However, through analysis of learning outcomes, authors were able to establish that the majority of the courses in both programmes do not reflect the development of values, beliefs, and attitudes (specifically, critical attitudes) in their outcomes. A minimum number of courses give attention to the development of values, beliefs, and attitudes, specifically critical attitudes. In some of the faculty programmes, this aspect is missing totally. Dispositions to change, flexibility, collaboration, and networking are hardly visible in the learning outcomes in most universities.

5. Findings

5.1 Understanding the main aims of TE programmes and competencies aspired to

Inquired as to how much focus is attributed to the development of specific competences of future teachers in teacher education programmes in Kosovo, participants (14 teacher educators from four faculties of education in Kosovo) addressed the fact that subject knowledge is dominating the programmes, although good subject content knowledge should be followed by pedagogical content knowledge. At the moment of the analysis, approximately, programmes included 70% subject knowledge and 30% pedagogical knowledge. It was also mentioned that the majority of courses focus on subject knowledge with limited pedagogical knowledge.

The focus groups also explored teacher educators' perspectives on what their understanding is about what the main aims of teacher education programmes should be and what the main competencies required for future teachers are. The synthesised answers are outlined in Table 3 below.

Table 3. Teacher educator perspectives on the main aims of teacher education programmes and main competencies aspired to

Teacher educators' perspectives on the main aims of preparing teachers	Teacher educators' perspectives on the main competencies required for future teachers
• with high competencies that are not limited to the Kosovan context • with knowledge and skills to be competent for the 21st century • with theoretical and practical competencies by bridging theory and practice and applying knowledge gained into the school context	• Subject knowledge • Pedagogical knowledge, e.g., didactics and methodology of subject teaching • Learning in nature (regarding natural science courses, among others) • Creative learning approaches that go beyond memorisation • Creativity, learning through play • Writing skills

• with skills, didactics and methodology that are ready to join the schooling system • who can use technology in their classroom • as researchers who are able in the future to improve their practice and solve problems • who can unpack curriculum provisions • who can engage their students in curricular and extracurricular activities.	• Empathy and being good listeners • Communication skills • Skills to motivate learners • Inquiry-based learning • Context-based learning • Digital competence, integration of ICT in their teaching • Action research to improve pedagogical practice • Critical thinking • Lifelong learning

5.2 Arrangement of the studies and teacher educators' pedagogical practices

In terms of how the programmes are delivered, the focus groups revealed that traditional lectures make up most of the class instruction time, and practical sessions are provided more during tutorials instructed by teaching assistants. Talking about theoretical concepts dominated discussions with limited practical sessions (held in laboratories with hands-on and practical learning activities). In some cases, learning through role-playing and simulations, inquiry-based learning approaches, project-based teaching and learning were mentioned. Typical independent coursework and practical tasks included collaborative elements, practical problem-solving for critical thinking tasks (e.g., research work), and tasks related to reading, analysing, discussing, and reflecting on their own learning. A review of course syllabuses from all programmes reveals many practical (independent and group) tasks, analyses, research tasks, discussions, and reflections. Although the student load seems to be appropriately distributed across all assessed programmes, students have a more passive role as listeners with limited opportunities to lead the learning process themselves.

5.3 Pedagogical practice

Numerous studies in recent years have provided support for the assertion that pedagogical practice is one of the most important components of initial teacher education. Pedagogical practice in this context relates to the aspects of teacher education that enable learning to take place in the classroom and provide oppor-

tunities for the acquisition of knowledge, skills, and attitudes within that particular context. It is an interactive process between student-teacher, mentor-teacher, and student in a particular learning environment. Pedagogical practices at the faculties of education in Kosovo were found to be an integral part of the primary education programme and a professional requirement, without which the student teacher cannot qualify as a teacher. In all programmes, students attend pedagogical practice for four consecutive years (2, 4, 6, and 8 weeks) with 25 ECTS in total. During this time (approx. 100–120 days of practice), students receive specific in-service teacher professional development in primary education institutions and are introduced to the professional work of teachers. In pedagogical practice, students are part of classroom settings, observe classroom dynamics and interaction with children, have direct contact with children, plan and organise classroom tasks, etc. Focus groups with teacher educators revealed that the implementation of the pedagogical practice is one of the weakest parts of the teacher education programmes. They considered better coordination of the work of the students, better collaboration between the student, teacher mentor, and teacher educator, and stronger collaboration with schools and kindergartens as important prerequisites for a successful practice.
Table 4 below presents the main challenges raised by teacher educators regarding the pedagogical practice and recommendations for improvement.

Table 4. Main challenges and recommendations on pedagogical practice

Main challenges regarding pedagogical practice	Recommendations to improve pedagogical practice
• The organisation of pedagogical practice is limited, and fragmented responsibilities between schools and universities are not clearly defined and negotiated. • Poor quality of mentoring (from school teachers and teacher educators at the University) and lack of feedback from mentors (in ITE) or teachers (in schools).	• Extend student teaching practice experience starting earlier with practical tasks at school.

• Contradictory expectations for student teachers - schools use traditional teaching, while we (ITE) focus on project-based or arguments-based teaching and learning (clash of ideologies). • Heavy workload of mentors and students, e.g., course and practice teaching happen at the same time (burden for students and mentors). The high student-mentor ratio influences the quality pedagogical practice experience.	• Develop pedagogical practice guidelines (for some faculties that do not have such a document) to agree on all parties' responsibilities and students' evaluation criteria. Divide students into smaller groups to guarantee systematic feedback sessions and student teachers' self-reflection. • Tasks assigned to students during pedagogical practice should improve (go beyond formalistic tasks).

5.4 Programme improvement against current challenges towards competence development

Teacher educators agreed that the current mindset in teacher education programmes gives knowledge development priority, with skills mainly being developed during pedagogical practice. The majority of courses focus on subject knowledge, with limited pedagogical knowledge. Teacher educators argued that there is limited 'treatment' of pedagogical content knowledge in the programmes and course plans for future teacher development, which are considered fixed and allow for limited flexibility and adjustment. The most mentioned basis for change and for programme improvement was the accreditation process that determines programme transformation. Accreditation and re-accreditation enable us to think about areas that need to change, and international experts' feedback determines the needs for change. Quality assurance systems within the institution collect feedback for improvement; students' reactions and evaluations of teacher educators and programmes were also highlighted.

Teacher educators also highlighted that there are limited discussion and reflection mechanisms amongst colleagues and amongst student teachers, as well as limited integrated teaching and cross-collaboration between different courses. Furthermore, infrastructural limitations such as a lack of lab equipment for additional hands-on experiments with student teachers and limited literature are considered constraints in the delivery of a competence-based framework for fu-

ture teachers. Teacher educators addressed the need for the capacity building and professional development of teacher educators for improving teaching methodology, research, and others. Moreover, they highlighted the need to address the limited pedagogical background of teacher educators. Table 5 below outlines the main findings deriving from the study on programme components.

Table 5. Findings on initial teacher education programme components analyses through EU framework supporting teacher competence development

Initial teacher education programme components	Detailed findings
Knowledge & understanding	Knowledge development is the priority in the programmes emphasised by teacher educators. • Subject matter knowledge is strongly presented and addressed by teacher educators; • Pedagogical knowledge, including knowledge of teaching and learning processes, is less addressed, although teacher educators advocated for more subject didactics and methodology knowledge and the importance of going beyond content knowledge, including pedagogical content knowledge. • Education Philosophy provides the foundation of education sciences. • Several courses address curricular knowledge, referring to the national curriculum as a framework. • Several courses are electives, and this knowledge is not acquired by all students, e.g., contextual, institutional, organisational aspects of educational policies. Working in school as an organisation, participating in organisational development, etc

	• Inclusion and diversity are emphasised as a rising issue important to address within programmes • Less space is provided for the use of technology in learning and needs more serious consideration. • Developmental psychology was highly valued and seen as an area to further address in the programmes • Group processes and dynamics, learning theories, and motivational issues remain in the margins of programme content and implementation. • Evaluation and assessment processes and methods are addressed through 1–2 courses and are considered highly important for the teaching profession.
Skills	Skills are mainly developed during the pedagogical practice period, and skills development is not a priority in programmes. • The need to bridge theory and practice for skills development was discussed by all initial teacher education (ITE) institutions representatives. • Several courses address aspects of planning, managing, and coordinating teaching. • Using teaching materials and technologies is not properly addressed and was highlighted as an important aspect which needs further consideration. • Managing students and groups was not mentioned as skills developed in the programme.

	• Fewer discussions occur on developing skills in monitoring, adapting, and assessing teaching/learning objectives and processes. • Research skills development remains at the knowledge level. The importance of inquiry and research-based learning was emphasised, and fostering research-oriented activities, such as action research to improve pedagogical practice, is mentioned. In one case, the importance of using, developing, and creating research knowledge to inform practices was discussed. • Collecting, analysing, interpreting evidence and data (school learning outcomes, external assessment results) for professional decisions and teaching/learning improvement remain in the margins of programme content and implementation. • Developing analytical and problem-solving skills should become the new focus of courses and programmes. • In primary and early childhood education, skills like learning through play and learning in nature were emphasised. • Only elective courses cover several important skills: 1) collaboration with colleagues, parents, and social services, 2) negotiation skills (social and political interactions with multiple educational stakeholders, actors, and contexts), 3) future teachers' creativity and 4) teachers' own metacognitive, interpersonal skills for learning individually and in professional communities.

	• Aspects related to teaching skills through content transferable skills are hardly visible in programme content and not mentioned at all by teacher educators. No discussion took place in regard to developing skills in adapting to educational contexts characterised by multi-level dynamics with cross-influences (from the macro level of government policies to the meso-level of school contexts and the micro level of classroom and student dynamics).
Dispositions, attitudes, beliefs, and values	The development of attitudes, beliefs and values for the teaching profession is the least addressed component of the programmes. Some ITE institutions have entirely ignored the component of dispositions: attitudes, beliefs, and values. • A limited number of courses highlight the development of values, beliefs, and attitudes, e.g., the critical importance of teacher attitudes. • There is no representation of issues concerning features and historical development of the subject area and its status as related to other subject areas (no attempts to develop teacher epistemological awareness). • Dispositions to change, flexibility, ongoing learning and professional improvement, including study and research, remain in the margins of learning outcomes and course implementation.

	• Commitment to promoting the learning of all students (e.g., considering students' special needs) is discussed as a valuable aspect but is almost absent in the programmes. • Dispositions to promote students' democratic attitudes and practices, as European citizens (including appreciation of diversity and multiculturality) do not exist either in programme content or programme implementation • Knowledge-focused courses fail to address the development of critical attitudes to one's own teaching (examining, discussing, questioning practices). • Developing critical thinking and attitudes towards media news and not scientific knowledge wasn't explicit. • Developing empathy was mentioned as important and needing further attention • In limited instances, programmes address the dispositions to tolerance, e.g., team-working, collaboration, and networking. No mention of a sense of self-efficacy or a growth mindset.

5. Practical implications and recommendations

When looking at possible programme improvements, teacher educators highlighted the need for more flexibility provided to students and following a more student-centred approach; increased focus on developing positive values and attitudes for the teaching profession; increased focus on integrating project-based learning and other hands-on and practice-based learning approaches into the teaching process; collaborative teaching and learning approaches among teacher educators; and increased focus on developing teachers who are: strategic teach-

ers that are capable of teaching in different areas; teachers that understand and respond to different situations; teachers that are ready to cope with different situations through different techniques; teachers that can teach even if they are not in a face-to-face and physical classroom environments; link situations with real-life problems; and motivate students to learn.
This analysis found that all teacher education institutions highlight important competencies for newly qualified teachers, which are in line with international trends. Strong academic subject knowledge was addressed and valued by teacher educators, but also future teachers' pedagogical competencies were addressed. Participants emphasised that subject knowledge is dominating in the programmes, approximately 70% of which include subject knowledge and 30% pedagogical knowledge.

The following is proposing possible future steps for programme improvement in three areas of the analysis.

Knowledge and understanding

1. Pedagogical knowledge-related subjects in the programme should be increased to at least 50% (n.b., this requires the inclusion of knowledge of teaching and learning processes, curricular knowledge, and knowledge of general education science).
2. To strengthen the bridge between subject knowledge and pedagogical knowledge. Transform subject studies into subject didactics and methodology-related courses in line with the national curriculum (i.e., designing student teachers' subject studies, the school level where they are going to teach should be considered, q and their subject studies should focus on these topics).
3. Increase student teachers' competences in contemporary educational psychology, including contemporary knowledge of neuroscience in education. Topics related to students' motivation and self-regulation in the learning process are highly important in the contemporary learning process.
4. More focus should be put on transferable competencies (21st-century competencies); a European framework could be used to develop student teachers' future competences, but also prepare them to develop their students' transferable competencies.

Development of the skills

1. Enrich student teachers' learning experience and integrate micro-teaching and co-teaching formats in university lecture rooms.
2. To start with a pedagogical practice already from the first months of the teacher education with small tasks at school (i.e., assistance teaching, observation). Student teacher's observation and practical experience create a good basis for discussions in the lecture room and help to bridge theory and practice.
3. In order to prepare student teachers to develop their students' transferable competencies (21st-century competencies), the learning process at the university should support the development of future teachers' transferable competencies. The learning process should include more project work, working in teams, planning their own learning activities, and developing leadership skills.
4. Action research as a method to improve one's own teaching should be integrated into the learning process. During their pedagogical practice, student teachers could carry out action research and use this as input for bachelor's/master's work.
5. The use of educational technology should be increased, e.g., the use of different learning environments, educational games, group work environments, etc.

Dispositions, attitudes, beliefs, and values

1. Throughout the programme, metacognition and self-reflection regarding student teachers' own teaching (examining, discussing, questioning practices) should be supported.
2. Developing critical thinking and attitudes towards non-scientific knowledge could be integrated into every course.
3. Focus on developing future teachers' democratic attitudes and practices, including appreciation of diversity and multiculturality, as future European citizens.
4. Develop values related to flexibility, continuous learning, and professional improvement, and the importance of change.
5. Future teachers' sense of self-efficacy and growth mindset should be developed throughout the programme. This can be supported by mutual trust and group processes occurring during the studies.

Main recommendations for policy development (university level)

1. To have a harmonised approach to teacher education in Kosovo, cooperation between teacher education faculties should be strengthened and jointly to develop a standard for teacher education.
2. Developing an induction programme for beginning teachers could help future teachers' socialisation in the organisation, avoid burnout and support their professional development.
3. To be in line with international developments, the networking and collaboration with European ITE institutions should be increased.
4. It might be considered to strengthen the integration of different subject areas and to prepare student teachers to teach several subjects and, at the same time, initiate national-level discussions to move towards project-based or phenomenon-based learning in general education.
5. Some teacher educators have limited pedagogical backgrounds; thus, it is important to raise teacher educators' competencies in teaching methodology, e.g., finding opportunities to practise regularly at school, carrying out school development projects, working together with teachers, and creating new learning materials and pedagogical practices.
6. Develop pedagogical practice guidelines (for some faculties that do not have such a document) to agree about all parties' responsibilities and students' evaluation criteria. Divide students into smaller groups to guarantee systematic feedback sessions and student teachers' self-reflection.

6. Conclusion

This study found that knowledge development is the priority in teacher education programmes. Subject-matter knowledge is strongly present, whereas pedagogical and psychological knowledge needs to be emphasised more. Courses in the initial teacher education generally do not give a significant amount of emphasis to the development of skills, and the analysis revealed that skills development is not a priority in the programmes. Skills are mainly developed during the pedagogical practice, which is yet another reason that this component needs strengthening. The development of attitudes, beliefs and values for the teaching profession is the least addressed component of the programmes and, therefore, should be supported throughout the whole programme implementation.

Practitioner research in teacher education programmes requires focused attention on the development of future programmes. One important way in which teachers manifest themselves as agents of change is through conducting research (Marchand-Oolbekking, 2020). Therefore, the development of research skills from the pre-service stage can contribute to shaping professionals who have an inquiring approach to their daily practices, and initial TE programmes are an ideal starting point for practising initial research skills and strengthening inquiry-based mindsets and evidence-based practices of future teachers.

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Chapter 2: Enhancing the quality of teacher education through research-based curricula and practices

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Abstract

The quality of teacher education plays a crucial role in shaping the future of education systems and preparing student-teachers to meet the diverse needs of students effectively. In recent years, there has been increasing recognition of the importance of research-based curricula and practices in enhancing the quality of teacher education. Thus, the present paper explores the concept of research competence and its connection to research-based curricula and practices in teacher education. Specifically, it examines the role of research competence and research-based curricula in promoting the quality of teacher education. Moreover, this study utilises the Theory of Planned Behaviour as a theoretical lens to understand the factors influencing student-teachers' engagement in research activities. To investigate these topics, a questionnaire was developed to measure student-teachers' research competence and perceptions of research-based curricula. Data were collected from student-teachers enrolled at the Faculty of Education University of Ljubljana, Slovenia, and the Faculty of Education University of Prishtina, Kosovo. The findings of this study indicate that student-teachers perceive that they possess moderate to high levels of research knowledge and research skills. Moreover, their attitude towards research is also positive. Another finding is that the research-based curricula significantly predict research knowledge, skills, and attitudes, emphasising their importance in improving teacher education quality. Overall, this research contributes to the understanding of research competence and the benefits of research-based curricula in teacher education.

Keywords: research-based curricula, quality of teacher education, research competence, research knowledge, research skills, research attitude, Theory of Planned Behaviour

1. Introduction

Globalisation has affected many areas of our lives, including education. The more developed a country is, the more emphasis is placed on education and teacher development. Schools (i.e., principals, teachers, and other educational staff) must also constantly strive to improve the quality of educational work and, consequently, to create a learning environment that allows students to develop optimally. School improvement can work primarily through self-evaluation (MacBeath, 1999) and reflection on one's work, supported by sustainable educational leadership (Hargreaves & Fink, 2006) that firmly establishes teachers' (the school's) professional autonomy and internal commitment to accountability and improves their work based on evidence they have gained.

However, given their crucial role in this endeavour, the fact that teachers also need professional knowledge and research methodological training should not be overlooked. Given the vital role of teachers in this mission, we must not only provide them with solid professional knowledge, but also train them thoroughly in research methods. An essential aspect of enhancing the quality of teacher education lies in recognising the pivotal role of data and research in informing educational practices and shaping the competencies of student-teachers. In this context, the integration of research-guided curricula and practices becomes an essential aspect of teacher education, designed to boost its quality. Hence, it becomes evident that research competence holds immense importance within the context of teacher education. By acknowledging the vital role of initial teacher education in our mission and providing them with solid professional knowledge and research methods, we establish a foundation for maintaining high-quality education. Therefore, we can confidently assert that research competence stands as a cornerstone and a vital part of teacher education, ensuring that educators are equipped with the necessary skills and knowledge to excel in their profession.

The phrase 'research competence' refers to (student) teachers' ability to identify relevant research questions, design and conduct research studies, analyse data, and apply research findings to their pedagogical practice. Research competence also includes critical thinking skills, such as the ability to evaluate research findings, identify potential biases or limitations, and make informed decisions based on research findings (Saqipi & Vogrinc, 2019; Štemberger, 2020; Toquero, 2021; Stan et al., 2022). Researchers (e.g., Yarullin et al., 2015; Garay-Argandona et al., 2021) define the concept of research competence in different ways, but its fundamental elements are the body of knowledge (knowing how

to know), skills (knowing how to do), and attitude (knowing how to be) that the (student) teachers' have in a certain subject area. Research competence plays a vital role in responding effectively to the diverse needs of students. By engaging in research-informed practices, student-teachers will be able to identify evidence-based instructional approaches, interventions, and accommodations that cater to the individual needs of their students. Research provides insights into effective teaching methods, inclusive pedagogies, and interventions for students with diverse abilities and backgrounds. Through research, student-teachers will be able to differentiate instruction, create inclusive learning environments, and ensure that all students have access to high-quality education. In summary, the diverse needs of students require student-teachers to possess research competence to effectively address these needs (Bayrak Özmutlu, 2022). However, there is limited evidence on how student-teachers are taught this important topic.

Research-based curricula aim to educate reflective teachers who are both time consumers and creators of knowledge (Krokfors et al., 2011). Therefore, educating student-teachers to conduct research has become a critical dimension of the development of research-based curricula, as student-teachers are required to be able to conduct research before moving into the classroom. We know from research (Niemi, 1996) how research-based curricula are implemented in certain contexts, particularly in the Nordic countries, but there is still a need to understand its application in different international educational contexts. Therefore, considering research competence and research-based curricula as distinct but closely related elements of teacher educators' practice is important. On the one hand, it is about how well teacher education trains student-teachers to be researchers; on the other hand, it is about how important it is for teacher educators to base their practice on empirical evidence. The purpose of this study is to examine the ways and extent to which teacher education curricula can be characterised as research-based by examining the current realities of how student-teachers are qualified and motivated to engage in teacher research. This research uses the Theory of Planned Behaviour (TPB) framework (Ajzen, 1991), which views a person's intention to perform a behaviour through the lens of motivation and attitude, subjective norms, and perceived behavioural control (the abilities to perform the behaviour). The TPB and research-based curricula are two theoretical frameworks that can be applied to the study of teacher education and the promotion of a research-based approach.

The TPB proposed by Ajzen (1991) suggests that behaviour is determined by one's attitude toward that behaviour, one's subjective norms, and one's per-

ceived behavioural control. In the context of teacher education, the TPB can be used to understand student-teachers' attitudes toward research-based curricula, the influence of peers and mentors, and how their perceived control over their pedagogical practices may affect their adoption of research-based curricula strategies. By examining the factors that shape student-teachers' attitudes and behaviours toward research-based curricula, teacher education can be designed to promote the adoption of evidence-based practices.

Research-based curricula, in contrast, emphasise the importance of engaging student-teachers in the research process to enhance their understanding of research and promote the adoption of evidence-based practices in their teaching (Gholam, 2019). Through research-based curricula, student-teachers can develop skills in identifying research questions, collecting and analysing data, and applying research findings to inform their pedagogical practice. By engaging student-teachers in the research process, teacher education can promote a research-based approach and prepare them to become reflective practitioners who continuously improve their pedagogical practice based on evidence. Together, TPB and research-based curricula provide a comprehensive framework for understanding the factors that influence student-teachers' adoption of research-based pedagogical practice (Archie et al., 2022). By applying this framework in teacher education programmes, educators and policymakers can develop effective strategies to promote a research-based approach and enhance the quality of education.

To examine the TPB in the context of teacher education and the promotion of research-based curricula, a questionnaire was developed to measure student-teachers' attitudes toward research and their perceived research competence as well as their perception of research-based curricula. Data were collected along these constructs to better understand how to improve the planning and implementation of research-based curricula in initial teacher education.

2. Context of the Study

Slovenian master's students have a course called 'Methodology of Scientific Research', in which student-teachers learn some statistical procedures that can be used in the field of education (e.g., descriptive statistics, correlation, Chi-square, t-test for independent and dependent samples, one-way ANOVA). Also emphasised are the basic characteristics of qualitative and quantitative approaches, the role of the researcher in qualitative research, and the relationship between

the researcher and the person being studied. Student-teachers learn about some types of educational research (e.g., case study, action research, evaluation research, etc.) and also about ethical aspects of research (protection of personal data, rights of participants in the research process). They also learn about criteria for determining the quality of research results of qualitative and quantitative research, as well as different ways or strategies for quality assurance of scientific results. In summary, the course empowers student-teachers to transcend the role of knowledge consumers and cultivates their abilities to become knowledge producers.

Master's students in Kosovo take two courses (3 hours per week, contact hours per course over 15 weeks) on research methods, one on qualitative methodology and one on quantitative methodology, covering topics such as types of research (descriptive research, action research, case studies, ethnography, etc.) in both traditions, formulation of topics and research questions, and design of instruments, samples, and analysis of qualitative and quantitative data (including various statistical tests and qualitative data analysis methods).

3. Methodology of research

3.1 Constructs of Research Competence

Based on the fundamental elements of research competence, it is helpful to break it down into its component parts. According to the literature (e.g., Yarullin et al., 2015; Garay-Argandona et al., 2021), the three key elements of research competence are knowledge, skills, and attitude. Knowledge competence refers to having knowledge of data, facts, concepts, and principles. Skills involve the ability to perform procedures, strategies, techniques, and other abilities. Attitude, in contrast, encompasses the cognitive, emotional, and behavioural components that influence our actions. These components are often considered part of the hidden curriculum, which refers to the implicit values, beliefs, and attitudes that students learn through their educational experiences (Reiban Barrera, 2018; Garay-Argandona et al., 2021). By breaking down research competence into these three elements, we were able to develop a questionnaire to identify specific strengths and weaknesses of student-teachers for each element and target interventions to improve them. For example, if a student-teacher struggles with statistics, we can focus on improving the student-teacher's research knowledge, skills, or attitude in this area.

The constructs were also based on the dimensions of the Theory of Planned Behaviour (Ajzen, 1991), focussing on subjective norms and perceived behavioural control to see the links with the attitude towards research competence.

3.2 Purpose and research questions

The purpose of this study was to investigate the ways and extent to which teacher education curricula can be characterised as research-based. Specifically, the aim was to examine the current realities of student-teachers' competence and motivation to engage in teacher research while also exploring their perceived knowledge, skills, and attitudes in relation to research in the field of education. More specifically, this study aimed to answer the following research questions:
RQ1: What is the level of perceived research knowledge among student-teachers in the context of research-based curricula?
RQ2: What is the level of perceived research skills among student-teachers in the context of research-based curricula?
RQ3: What are student-teachers' attitudes toward research-based curricula?
RQ4: To what extent do research-based curricula predict the levels of perceived research competence among student-teachers?

3.3. Research Design

This study had a quantitative approach. It is an analytical and cross-sectional study, which is a type of observational study that gathers data from a specific population at a single point in time. The cross-sectional design allows for the examination of variables and their relationships at a specific moment, providing a snapshot of the population under investigation.
We used the 1KA online survey tool to create an online questionnaire, which was the primary tool used to collect relevant data needed to answer the research questions posed in the present study. The decision to survey master's students was driven by the fact that they had already attained a bachelor's degree and were currently enrolled in or had successfully completed a master's course focused on developing research competence.

3.4 Sample

The population under study consisted of master students at the Faculty of Education, University of Ljubljana and master students at the Faculty of Education, University of Prishtina. The selection of these two educational contexts,

Slovenia and Kosovo, was influenced by several factors. First, there has been a history of fruitful collaboration between researchers and course instructors, which included the development of research method courses and the alignment of programme structures and content. Second, there is an enduring tradition of cooperation between Slovenia and Kosovo. This cooperation extends beyond academia to socio-cultural dimensions and the education systems of the two countries. The school systems of Slovenia and Kosovo share many similarities, largely attributed to their common historical legacy, as they were part of the same country in the past. In light of these shared attributes, Kosovo has adopted the Slovenian model of teacher education, further strengthening the rationale for comparing these two contexts. Third, the similarity in their education models also facilitates a larger sample size for research, thereby enhancing the robustness and reliability of the research findings. This larger sample size offers a more comprehensive representation of the population, thereby improving the generalisability and validity of the study's conclusions. In addition, we believe that by using samples from two institutions, we will be able to examine the contextual factors that may affect the effectiveness of research-based curricula and shape the way research competence has evolved in communication with other variables.
The final sample consisted of 125 master's students studying at the Faculty of Education, University of Ljubljana, and 102 master's students studying at the Faculty of Education, University of Prishtina.

It should be noted that both samples were merged and treated as one combined sample for the statistical analyses. This approach was chosen to increase the sample size, improve statistical power, and allow for a more comprehensive analysis of the research questions.

3.5 Instrument

Measuring the research competence of pre-service teachers and research-based curricula is a critical aspect of ensuring that they are equipped with the necessary skills and knowledge to conduct and evaluate research in the field of education. However, before any measurements can be taken, the questionnaire used to assess research competence and research-based curricula must be created and validated. Questionnaire creation and validation is a process that involves establishing the reliability and validity of the instrument used to measure a construct. In this context, our process of creating and validating a survey questionnaire took several steps, including item selection, face validity, pilot testing, data screening, and statistical analysis.

The questionnaires used in this study were developed in two languages to accommodate the participants from both Slovenian and Kosovan contexts. To ensure the consistency and equivalence of the questionnaires in both languages, a rigorous translation and validation process was undertaken. Initially, the original questionnaire was translated from the source language (i.e., English) to the target language (i.e., Slovenian or Albanian) by professional translators who were proficient in both languages. The translated versions were then reviewed by a panel of experts, including language specialists and researchers familiar with the content area, to ensure accuracy and cultural relevance.

When drawing up the questionnaire, an analysis of the literature on teacher research was considered, and the empirical research already conducted in this area was reviewed (e.g., Krek & Vogrinc, 2007; Podgornik & Vogrinc, 2017; Breen & Lindsay, 1999; UCL Connected Curriculum, 2017). In the item selection process, we selected items measuring perceived research knowledge, perceived research skills, perceived research attitude and perceived research-based curricula and combined all of these items into one instrument measuring perceived research competence and perceived research-based curricula. After selecting the items and developing the instrument, we proceeded to the process of face validity, in which we and a group of experts in the field evaluated whether the instrument measured perceived research competence by providing feedback on the items and the instrument itself. After successful completion of face validity, the instrument was pilot tested with a small group of participants, their data collected, and their responses analysed. The data analysis allowed us to remove some items from the instrument. The last step was data screening, in which we verified the consistency and completeness of the responses. Finally, the internal consistency (Cronbach's Alpha) and principal component analysis (PCA) were done, which gave us the final version of our instrument. When using PCA, we have previously assessed the suitability of our data for PCA through the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, which yielded a value of 0.85, indicating a high level of adequacy for factor analysis. In addition, Bartlett's test of sphericity was found to be significant ($p < 0.05$), confirming the presence of underlying factors within our dataset.
The final instrument used in the survey consisted of 46 items divided into four key elements (see Table 1).

Table 1. Questionnaire items

Element	Number of items	Items	Cronbach's alpha
Research knowledge	15	See Table 2	0.948
Research skills	17	See Table 3	0.940
Research attitude	10	See Table 4	0.919
Research-based curricula	4	See Table 5	0.817

Data were collected using an online questionnaire (a series of questions on a five-point Likert scale measuring perceived research knowledge, perceived research skills, and perceived attitudes toward research). The entire study was conducted in the 2021/22 academic year.

3.6 Data Analysis

The database (.sav) generated by the 1KA platform was imported into the s IBM SPSS Statistics for Windows, Version 25.0, Armonk, New York, with which descriptive analysis, exploratory factor analysis (EFA), reliability analysis and multivariate regression analysis were performed.

Moreover, to address our research questions (RQ1–RQ3), we used descriptive statistics to analyse the data. Descriptive statistics enabled examining the student-teachers' perceptions of research knowledge, skills, and attitudes. For our fourth research question (RQ4), we conducted multivariate regression analysis; this statistical technique helped us understand the relationship between research-based curricula and the student-teachers' levels of research knowledge, skills, and attitudes. By using multivariate regression analysis, we were able to assess the significance and strength of this relationship, which provided valuable insights into the impact of research-based curricula on student-teachers' research competence.A p-value of less than 0.05 indicated that the results were statistically significant and not due to random chance, thus providing a robust basis for drawing substantive conclusions.

4. Findings

Prior to analysis, we examined the descriptive statistics for each construct and dimension of research competence. The results are presented in Table 2, Table 3, and Table 4.

4.1 Research knowledge

From Table 2 (see below), we can make several observations about student-teachers' perceived research knowledge: first, we can see that participants generally indicate that they have a good knowledge of various areas related to educational research. The mean scores for all statements range from 2.41 to 3.71, indicating a moderate to high level of knowledge among student-teachers. Second, the statement with the highest mean value is 'I know the characteristics of different data collection instruments (e.g., questionnaire, knowledge test, list of interview questions)' with a mean of 3.71, indicating that participants are most knowledgeable in this area. This is followed closely by the statement 'I know the basic ethical principles of educational research' with a mean of 3.50. In contrast, the statement with the lowest mean value is 'I know programs for statistical data analysis (e.g., SPSS)' with a mean of 2.41, indicating that participants have relatively little knowledge in this area and that there is room for improvement.

In addition, the statements with the highest mean scores relate to understanding the characteristics of different data collection instruments, the basic ethical principles of educational research, and the quantitative research approach. This indicates that student-teachers perceive they have a relatively good understanding of these topics. However, the statements with the lowest mean scores relate to the knowledge of statistical data analysis programs and understanding the characteristics of action research, suggesting that student-teachers perceive they have less knowledge in these areas.

Table 2. Descriptive statistics for research knowledge (sorted by the column 'Mean' in descending order)

Research knowledge	N	Minimum	Maximum	Mean	Std. Deviation
I know the characteristics of different data collection instruments (e.g., questionnaire, knowledge test, list of interview questions).	227	1	5	3.71	0.85
I know the basic ethical principles of educational research.	226	1	5	3.50	1.05
I know the characteristics of a quantitative research approach.	225	1	5	3.46	0.94
I learned about the ways in which research can be carried out in the field of education.	224	1	5	3.44	0.95
I know the characteristics of a qualitative research approach	225	1	5	3.42	0.93
I know different sampling methods or selection of persons suitable for research.	226	1	5	3.41	0.95
I know how to choose the most appropriate research methodology for my research work.	227	1	5	3.40	0.95

I can check the quality of the designed data collection instrument (its validity and reliability).	224	1	5	3.28	0.94
I know various statistical procedures used in educational research (e.g., mean values. measures of dispersion. correlation coefficients).	226	1	5	3.27	1.04
I know different ways of checking the quality of data collection instruments (e.g., validity and reliability).	226	1	5	3.23	0.94
I know the characteristics of quantitative data analysis.	225	1	5	3.15	1.02
I know the characteristics of qualitative data analysis.	225	1	5	3.14	0.99
I can write a report on the conducted empirical research.	223	1	5	3.00	1.01
I know the characteristics of action research.	225	1	5	2.95	1.09
I know programs for statistical data analysis (e.g., SPSS).	223	1	5	2.41	1.32

4.2 Research skills

The results presented in Table 3 indicate that student-teachers seem to believe that they have relatively good research skills, as indicated by the mean scores for most items being above 3.5. The highest mean score was for the item 'I can quote the literature I've read' (4.21), indicating that student-teachers feel confident in their ability to recall and reference relevant literature. Other items that were rated highly include 'I know how to analyse literature I've read', 'I can do a literature review needed for the theoretical basis of my research', and 'I can explain the purpose of my research'. This indicates that participants feel confident in their ability to critically analyse literature and understand the importance of having a strong theoretical foundation for their research. However, some items had lower mean scores, such as 'I can create an (action) plan for introducing changes in educational practice based on the findings of empirical research' and 'I can write a statistical interpretation'. This suggests that participants may need more professional development programmes or practice in these areas. Overall, it seems that student-teachers have a solid foundation of research skills but may need further development in certain areas to become better researchers.

Table 3. Descriptive statistics for research skills (sorted by column 'Mean' in descending order)

Research skills	N	Minimum	Maximum	Mean	Std. Deviation
I can quote the literature I've read.	225	1	5	4.21	0.83
I know how to analyse literature I've read.	225	2	5	4.13	0.78
I can do a literature review needed for the theoretical basis of my research.	225	2	5	4.09	0.82
I can explain the purpose of my research.	225	2	5	4.01	0.79
I can formulate research objectives.	227	2	5	3.92	0.75
I can formulate research questions.	226	2	5	3.90	0.76

I can formulate hypotheses.	227	2	5	3.90	0.76
I can present the results and findings of my research to the general public (e.g., to my classmates, at a conference).	224	1	5	3.89	0.86
I can design various data collection instruments (e.g., questionnaire, knowledge test, list of interview questions).	226	1	5	3.83	0.82
I can formulate research conclusions based on the collected data.	224	2	5	3.80	0.84
I know how to explain the significance of the study.	227	1	5	3.78	0.88
I can describe the data collection process.	224	1	5	3.78	0.93
I can design a research plan.	225	1	5	3.50	0.92
I can write a summary of an empirical research report (e.g., seminar papers).	224	1	5	3.46	1.00
I understand research reports.	224	1	5	3.46	0.80
I can write a statistical interpretation.	224	1	5	3.22	1.07
I can create an (action) plan for introducing changes in educational practice based on the findings of empirical research.	224	1	5	3.00	1.15

4.3 Attitude toward research

Regarding the attitude towards research (see Table 4), it seems that student-teachers have a positive attitude toward research in the field of education. The mean scores for all items are above 3.0, indicating general agreement with the statements. The highest mean score was for the statement, 'For effective teaching at the faculty, it is important that teachers and teaching assistants engage in research' (4.13), indicating that participants believe that research is important for effective teaching. The items related to personal interest in research ('I am interested in research in the field of education') and belief that engaging in research helps solve problems in daily practice ('Engaging in research helps teachers solve problems in daily practice') also received high mean scores (above 4.0), indicating that participants value the practical applications of research in education. However, the item 'I like reading research reports' received the lowest mean score, indicating that participants may not find reading research reports as enjoyable or engaging as other aspects of research in education. Overall, these results suggest that participants understand the importance of research in teacher education and its practical applications but may not necessarily like all aspects of research, such as reading research reports.

Table 4. Descriptive statistics for research attitude (sorted by column 'Mean' in descending order)

Research attitude	N	Minimum	Maximum	Mean	Std. Deviation
For effective teaching at the faculty, it is important that teachers and teaching assistants engage in research.	225	1	5	4.13	0.86
I think it is important that the teacher uses examples from his research in his lectures.	224	1	5	4.07	0.91
Engaging in research helps teachers solve the problems of daily practice.	225	1	5	4.03	0.89

It is important to me that my teachers and teaching assistants do research.	224	1	5	3.84	1.03
I am interested in research in the field of education.	225	1	5	3.80	1.02
Anyone who wants to be a good teacher must also engage in research work.	225	1	5	3.68	1.02
When I will work in school, I will do research work.	225	1	5	3.65	0.90
Knowledge of research in the field of education helps me to understand the theoretical concepts that we have discussed in various subjects.	225	1	5	3.54	1.07
Knowledge of research in the field of education helps me succeed in studying.	225	1	5	3.50	1.12
I like reading research reports.	223	1	5	3.13	1.11

Based on Tables 2, 3, and 4, it appears that student-teachers generally have a good level of research competence, with mean scores above 3.5 for most items. The highest mean scores were found for research skills, indicating that student-teachers feel confident in performing various research tasks such as quoting literature, analysing literature, and conducting literature reviews. The lowest mean scores were found for the attitude toward research, indicating that while student-teachers recognise the importance of research for effective teaching,

they may not necessarily feel strongly motivated to conduct research themselves. However, there is some variability in the results, as indicated by the standard deviation values, indicating that there is some variation in students' perceived skills, knowledge, and attitude toward research that may need to be addressed through targeted interventions and professional development programmes.

Overall, these findings suggest that pre-service teachers have a good foundation in research competence but may benefit from further support and encouragement to fully develop their research skills and attitudes. This could include opportunities for research experiences, mentoring by experienced researchers, and education about the value of research for improving educational practice.

4.4. Research-based curricula

Next, we present descriptive statistics for each item measuring research-based curricula.

Table 5. Descriptive statistics for the items measuring research-based curricula (sorted by column 'Mean' in descending order).

Research-based curricula	N	Minimum	Maximum	Mean	Std. Deviation
I know the research work of my teachers and teaching assistants.	225	1	5	2.93	1.20
I had the opportunity to talk with researchers from the field of education.	224	1	5	2.87	1.12
I feel part of the faculty research community.	225	1	5	2.83	1.14
I know the research goals of the faculty.	225	1	5	2.76	1.21

Based on the data in Table 5, it can be observed that respondents have a relatively neutral to slightly negative attitude toward research-based curricula at the faculty, with mean scores ranging from 2.76 to 2.93 on a scale of 1 to 5. The standard deviations for these items are relatively high, ranging from 1.12 to 1.21, indicating a wide range of responses among respondents.

This suggests that there is room for improvement in promoting research-based curricula among faculty and increasing student-teacher engagement and awareness of research. It may be useful to further investigate the reasons for these relatively neutral attitudes and explore strategies to promote a more positive view of research-based curricula among student-teachers.

4.5 Research-based curricula and research competence

Recognising the importance of research-based curricula in teacher education, we assumed that its implementation would strengthen the perceived research competence of student-teachers. To investigate this assumption, we employed multivariate regression analysis.

In this process, we first synthesised data from multiple variables representing research knowledge, skills, attitude, and research-based curricula. This summarisation was achieved by combining individual variables for each aspect into four composite variables: knowledge, skills, attitude, and research-based curricula. These composite variables were formed by averaging corresponding individual variables measuring a particular aspect.

The creation of these composite variables simplified the analysis and interpretation of the data, allowing for more efficient comparison and differentiation of research competence based on a single metric, as opposed to the need for separate examination of multiple variables. Moreover, the use of these composite variables enhanced the reliability and validity of our analysis by encompassing the interconnectedness of various elements of research competence. We then calculated descriptive statistics for four composite variables (see Table 6).

Table 6. Descriptive statistics for composite variables

Composite variables	N	Mini-mum	Maxi-mum	Mean	Std. Devi-ation
knowledge	220	1.47	5.00	3.25	0.77
skills	222	1.94	5.00	3.77	0.62
attitude	222	1.70	5.00	3.74	0.76
research-based curricula	224	1.00	5.00	2.84	0.94

Table 6 shows that the composite variable 'skills' has the highest mean of 3.77, indicating that participants, on average, perceive themselves as having a relatively high level of research skills. The composite variable 'attitude' also has a high mean of 3.74, indicating that, on average, student-teachers have a positive attitude toward research-based curricula.

The composite variable 'knowledge' has a mean of 3.25, indicating that, on average, participants perceive themselves as having a moderate level of research knowledge. The composite 'variable' research-based curricula has the lowest mean of 2.84, indicating that, on average, student-teachers perceive a relatively low level of research-based institutional culture. The standard deviations for all composite variables are relatively small, ranging from 0.62 to 0.94, indicating that responses are relatively consistent and close to the mean. Overall, these results are consistent with previous findings in our study, specifically that there are areas for improvement in teacher education.

Finally, a multivariate regression analysis was conducted to examine the extent to which research-based curricula predict the student-teachers' levels of research competence. The results are presented in Table 7.

Table 7. Parameter estimates of the multivariate regression

Dependent Variable	Parameter	B	Std. Error	t	Sig	95% Confidence Interval		Partial Eta Squared
						Lower Bound	Upper Bound	
attitude	intercept	2,128	,119	17,834	,000	1,893	2,363	,598
	research-based curricula	,571	,040	14,271	,000	,492	,650	,488
skills	intercept	2,554	,106	24,110	,000	2,345	2,762	,731
	research-based curricula	,428	,036	12,060	,000	,358	,498	,405
knowledge	intercept	1,643	,122	13,466	,000	1,403	1,884	,459
	research-based curricula	,570	,041	13,928	,000	,489	,650	,475

Note: Attitude: R Squared = -488 (Adjusted R Squared = -485)- Skills: R Squared = -405 (Adjusted R Squared = -402)- Knowledge: R Squared = -475 (Adjusted R Squared = -473)

Table 7 presents the parameter estimates of the multivariate regression analysis conducted to examine the effect of research-based curricula on the research competence (i.e., attitude, skills, and knowledge) of student-teachers.
For attitude, the intercept was 2.128, and the coefficient of research-based curricula was 0.571, indicating that for every unit that research-based curricula increase, the attitude score increases by 0.571 units. The t-value of 14.271 indicates that this effect is statistically significant ($p < 0.001$).

For skills, the intercept was 2.554, and the coefficient of research-based curricula was 0.428, indicating that for every unit that research-based curricula increase, the skills score increases by 0.428 units.

The t-value of 12.060 indicates that this effect is statistically significant ($p < 0.001$). For knowledge, the intercept was 1.643, and the coefficient for research-based curricula was 0.570, indicating that for every unit that research-based curricula increase, the knowledge score increases by 0.570 units. The t-value of 13.928 indicates that this effect is statistically significant ($p < 0.001$).

Based on the provided parameter estimates, we can see that the regression coefficient (B) for research-based curricula is highest for the dependent variable 'attitude' (B=0.571), followed by 'knowledge' (B=0.570) and 'skills' (B=0.428). This indicates that research-based curricula have the strongest effect on the student-teachers' attitude toward research, followed by their research knowledge and research skills.

5. Discussion and Conclusion

This research has provided new insights into the debate on enhancing the quality of teacher education through research-based curricula and practices. These new insights can be grouped into a few categories.

First, we found that student-teachers perceive they have moderate to high research knowledge. Specifically, they exhibit a strong understanding of the characteristics of different data collection instruments and the basic ethical principles of educational research. This indicates that they are adequately equipped to select appropriate research tools and adhere to ethical guidelines, forming a solid foundation for conducting research. However, there are notable areas where student-teachers show a deficiency in perceived knowledge. This includes knowledge of statistical data analysis programs (such as SPSS) and the characteristics of action research. This lack of knowledge can pose significant challenges in conducting rigorous and effective research, particularly in terms of data processing, interpretation, and application of research findings for practical improvements in educational settings. These findings are similar to those of Lovett and Lee (2018), who found in their study that secondary mathematics student-teachers did not have strong general statistical knowledge. Therefore, in order to improve the research knowledge of student-teachers, we would recommend integrating comprehensive training on statistical data analysis software (e.g., SPSS, R) into their curriculum, introducing specific courses on action research, providing practical opportunities to participate in real-world research projects, encouraging the formation of learning communities for collaborative learning, using online resources for supplementary instruction, regularly assess-

ing their understanding to obtain timely feedback, and inviting educational experts to give guest lectures or workshops on relevant topics.

Second, the results indicate that student-teachers have high levels of self-perceived competence in a number of essential research skills, in particular, their abilities to quote literature, analyse it, and conduct literature reviews. These skills are fundamental to their research practices, signifying that student-teachers have a robust grounding in engaging with academic literature and constructing theoretically informed research. However, despite these strengths, there are noticeable areas in which pre-service teachers perceive their research skills to be less proficient. Notably, creating action plans for introducing changes in educational practices based on research findings and writing statistical interpretations scored the lowest. These skills are central to translating research into practice and drawing meaningful conclusions from data. These findings are consistent with the findings of Ipanaqué-Zapata et al. (2023), who reported that students had difficulty focusing on their research topic, defining study problems and objectives, and applying statistical techniques for data processing. Hence, targeted educational interventions are recommended to support these identified areas of improvement. For instance, offering specialised workshops or courses focused on statistical interpretation could enhance their ability to comprehend and communicate statistical findings effectively. Similarly, incorporating practical components in the curriculum that guide student-teachers to link their research findings to real-world educational practices could substantially improve their skills in creating action plans for educational change.

Third, it seems that participants understand the importance of research in education and its practical applications and thus have a positive attitude towards research. These findings are in line with the findings of Issah and Braimah (2020), who found that student-teachers had a positive attitude towards research. However, we also found that the preference for reading research reports was comparatively lower. Based on these findings, we recommend considering strategies that enhance the engagement and interest of student-teachers in reading research reports. These could include incorporating interactive and collaborative activities, providing practical examples and case studies, and promoting discussions on the practical implications of research findings. By implementing these recommendations, educators can foster a more comprehensive and enjoyable research experience for student-teachers, further strengthening their understanding and appreciation of research in the field of education.

Fourth, through multivariate regression, we found that research-based curricula were a significant predictor of research knowledge, skills and attitudes among the student-teachers studied, with a positive effect. The findings highlight the importance of integrating research-based curricula into teacher education, as this could enhance attitude, skills, and knowledge related to research and, therefore, enhance the quality of teacher education. There are several studies that support the idea that research-based curricula have a positive impact on the quality of teacher education. For example, Furtak et al. (2012) found that inquiry-based teaching methods, which are a form of research-based curricula, positively impacted student achievement and attitudes. Moreover, Van Katwijk et al. (2021) found a small but positive relationship between the quality of student-teacher inquiry projects and the quality of their pedagogical practice. Furthermore, Aspfors and Eklund (2017) found that research-based teacher education enhances personal and professional competence, develops an inquiry mindset, and positively contributes to the students' future teaching profession.

The results of this study provide empirical evidence of the applicability of the TPB in understanding and enhancing the quality of teacher education through research-based curricula and practices. The TPB emphasises the importance of attitudes towards behaviour. By integrating research-based curricula, we expose student-teachers to the value and significance of research in education. This helps develop positive attitudes towards research, highlighting its relevance and practical applications to improve educational practices. The TPB also emphasises the role of subjective norms in shaping behaviour. By incorporating research-based curricula, we establish a normative expectation within teacher education that research is a fundamental and valued aspect of professional practice. This normative influence encourages student-teachers to engage in research, seek opportunities to conduct research, and view research as an integral part of their role as educators. The TPB underscores the significance of perceived behavioural control. Through research-based curricula, student-teachers acquire essential research skills and knowledge, such as data collection, analysis, and interpretation. By providing comprehensive professional development courses and practical experiences, we enhance their confidence and competence in conducting research, thereby strengthening their perceived control over engaging in research activities. By promoting a research-informed culture through the integration of research-based curricula, student-teachers are equipped with the necessary attitudes, subjective norms, and perceived behavioural control to engage in research practices. This prepares them to critically evaluate educational

practices, apply evidence-based approaches, and contribute to the continuous improvement of teaching and learning outcomes. Ultimately, this approach enhances the quality of teacher education and promotes a culture of research-informed decision-making in the education system.

Finally, in order to strengthen the comparative perspective of the study, we also analysed the results of the two groups separately. The results showed that students studying at the Faculty of Education, University of Ljubljana, demonstrated a good level of perceived research competence. Moreover, students expressed a high interest in the research activities of their educators, indicating a keen appreciation for research within the teaching process. However, the group's proficiency in understanding the characteristics of action research and in creating action plans based on empirical research findings could be further developed. Additionally, fostering a greater interest in reading research reports could help bolster their overall research attitude. In contrast, students studying at the Faculty of Education, University of Prishtina, also showed commendable perceived strengths in understanding the basic ethical principles of educational research and in accurately quoting literature, mirroring their Ljubljana counterparts. They also demonstrated high perceived skills in explaining the significance of their study, pointing to a strong ability to articulate research value. Their perceived attitude towards research was positive, especially concerning the research activities of their educators and their interest in the field of education. However, there is room for improvement in their perceived knowledge of statistical data analysis software and their ability to write statistical interpretations. Similar to the Ljubljana group, a potential area for development lies in nurturing a stronger interest in reading research reports. Both groups demonstrate good perceived strengths in research knowledge, skills, and attitudes, showcasing a positive trend in the development of future researchers. The identified areas for improvement provide valuable insights into where educational efforts could be focused to further enhance their research competence. By addressing these areas, educators could better equip students with a comprehensive set of skills and knowledge essential for effective research.

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Chapter 3: Beliefs and attitudes on democracy of future primary school teachers: comparing initial teacher education in Italy and Kosovo

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Abstract

This chapter presents a qualitative comparison between Italian and Kosovan systems for initial teacher education through the measurement of students' beliefs and attitudes toward their future role as teachers in democratic societies. Starting from a theoretical analysis of the literature on teacher preparation and beliefs, the chapter will delve into the two educational systems, tracing the recent developments that have led at the national level to the creation of university programmes for future primary teachers. The chapter will present the results of a parallel survey carried out in Italian and Kosovan universities on undergraduate and graduate students' beliefs and attitudes adapting validated scales from previous studies. The research aims to measure student-teachers' beliefs and attitudes toward teaching and pedagogical approaches and to understand, comparatively, the implications of initial teacher education. Through the qualitative comparison, the results of the parallel survey will be related to the two university programmes. The study will highlight if and to what extent university education can promote teacher professionalism and attitudes and beliefs in future teachers, with a broader perspective on the different institutional and educational scenarios that characterise primary education in Italy and Kosovo.

Keywords: democracy, initial teacher education, beliefs, attitudes, Italy, Kosovo

1. Introduction

The role of teachers and professionalism has evolved as a result of developments in the profession and as a result of responding to societal and technological developments, as well as globalisation trends. As a result of such a context, various benchmarking processes at the European level have evolved, including the Council of Europe Framework on Democratic Culture. At a programmatic level, teacher education institutions have been facing challenges in addressing and accommodating generic concepts, including soft skills and competencies such as citizenship, democracy, and wider values. Within this evolution, student-teachers' programmes and the preparation of future teachers are considered crucial aspects to impact the quality of teaching activities and teachers' professionalism.

The prospective teachers' courses in Italy and Kosovo, in their structure and aims, reflect the importance of supporting the development of teachers' professional practice and knowledge by focusing either on subject-related and pedagogical knowledge and skills or trainee activities in schools.
This study aims to delve into initial teacher education in the two countries, examining future teachers' beliefs. It builds upon the network and the research work carried out within the QATEK project - Towards a quality-oriented system of initial teacher education to increase teacher professionalism in Kosovo (2019–2113/001-001). The project aimed at developing comprehensive internal quality assurance mechanisms in ITE by setting indicators for high-quality teacher education in four higher education institutions in Kosovo that provide courses for student-teachers.

2. Review of the literature on student-teachers' beliefs

Teachers' commitment to democratic education is becoming particularly relevant in the schools of contemporary societies, characterised by increasing diversity in terms of the cultural and socioeconomic backgrounds of students and their diverse needs. Teachers are required to gain the knowledge, skills, and attitudes necessary to foster democratic teaching and learning processes in the classroom and at school, on a general level.

The academic literature defines beliefs as conceptions, implicit theories (Clark, 1988), dispositions to action (Brown & Cooney, 1982) or individual representations of reality, which have their own validity and credibility to guide thoughts and behaviour (Harvey, 1986). They can be conscious or not and can be inferred from what people say or do. Beliefs also become solid or even stronger

when they appear as 'belief systems'. They are formed when an interaction takes place between attitudes, values, and knowledge (Ciani, 2019).

Clark (1988) defines teachers' beliefs as aggregations of cause-and-effect propositions, generalisations drawn from personal experience, values, and prejudices often inconsistent with actions or with any theory of reference in the field of education.

Shechtman (2002) conceptualises teacher beliefs as educational beliefs held by teachers about specific domains. Beliefs can be aggregated into clusters around a particular issue and develop attitudes that can guide behaviour. Clusters of beliefs are linked to each other and may also be connected to wider clusters of values and attitudes. According to his review, the principles of democracy are related to three concepts or values (i.e., freedom, equality, and justice); these principles are the basis for most democratic teacher education programmes (Shechtman, 2002; Novak, 1994).

Democratic teacher orientations are generally supported by academic studies and research, especially in view of the effectiveness they have on the learning of students coming from disadvantaged backgrounds. Teachers are continuously challenged, trying not to select, classify, and exclude students from reaching common goals. The good teacher is described by students as understanding, helpful, and friendly; research has highlighted a positive association between classroom climate, student behaviour and well-being, and teachers' democratic orientations (Novak, 1994).

Studies have pointed out the importance of beliefs in relation to teaching and teacher education, as they are strongly intertwined with the development of attitudes, values, and perceptions (Pajares, 1992). According to teacher cognition studies, more than the differences between values and attitudes, the most problematic issue is the difference between beliefs and knowledge, although research on educational psychological literature often found no distinction between the two (Alexander et al., 1991).

A study by Biesta, Priestley, and Robinson (2015) on teacher beliefs indicated the relevance of past experience in informing effective teaching. This experience is related not only to the personal and professional level but also to the culture and the society people live in. Teacher education and the opportunities provided to future teachers to practise teaching can strengthen or threaten teachers' beliefs in an ongoing process of reframing values and perspectives. In this view, teacher education programmes provide opportunities to engage prospective teachers

in this process, reinforcing the development of effective and democratic beliefs (Sheridan, 2016). At the same time, student-teachers' beliefs may be influenced by their beliefs developed before attending the course and by the quality of their professional experiences. The combination of these different aspects is resulting in a wide range of teachers' views within the student-teacher population.

The relevance of teachers' beliefs within teacher education has often been examined through a double approach that entails philosophical and psychological elements. From the philosophical perspective, beliefs are intended as the trigger for change in the teacher education program; in contrast, the psychological approach underscores the relevant influence of student-teachers' past beliefs about teaching that converge within the ITE curriculum, influencing its development. In this view, and following a constructivist conception of learning, beliefs are crucial because they affect prospective teachers' meaning and sense in relation to their study and can further represent a guide for future teaching activities (Richardson, 2003).

The support of the development of student-teachers' beliefs is considered a key element in improving teachers' professionalism (Endacott & Sturtz, 2015). However, little research has been focused on the beliefs of prospective teachers; issues such as subject-related pedagogy and traineeship through classroom practice have been favoured instead (Garrits, 2010).

The purpose of this research is to investigate future primary teachers' beliefs in two countries (namely Italy and Kosovo) through a survey questionnaire on democratic values, beliefs, and attitudes. The questionnaire is the result of the integration of different scales validated in previous studies. Starting with a general overview of the initial teacher education in Italy and Kosovo, the aims and methodology of the study are presented. Results highlight similarities and discrepancies between the two student-teacher populations, shedding light on their beliefs in relation to equality, freedom, and motivation but also reflexivity in teaching and the formatting function of evaluation.

3. Characteristics of Initial teacher education in Italy

Initial teacher education in Italy is carried out at the higher education level and is characterised by the presence of two different programmes, according to the level of education at which teachers will be teaching:

- A single-cycle university programme for pre-primary and primary teachers.
- A course for secondary teachers focused on the discipline they will teach, plus the acquisition of specific competences related to anthropology, psychology, pedagogy, teaching methods, and technologies. Initial teacher education for secondary teachers is currently under reform after Law 107/2015.

The involvement of higher education institutions (hereinafter: HEIs) as providers of pre-service education for pre-primary and primary education teachers started with the DM 249/2010 and has been implemented since the 2011/12 academic year. Ministerial Decree 249/2010 established for the first time in Italy that the Primary Education Sciences (Scienze della Formazione Primaria) courses should be organised by HEIs in the departments of educational sciences (or other departments upon authorisation by the Ministry of Education).

For admission to the Primary Education Sciences course, it is necessary to hold an upper secondary education leaving certificate or any other equivalent qualification obtained abroad. Since these courses have a planned number of available places, established every year by the Ministry of Education at the national level, students must pass an admissions test, which is drafted by single universities according to the decrees published every year by the Ministry of Education.

The course lasts five years for a total of 300 ECTS credits and includes trainee activities in schools, which usually start in the second year of the course, for a total of 600 hours (24 ECTS credits). At the end of the course, prospective teachers take the final exam, in which they discuss a final thesis and the final practice report. This final exam qualifies them to teach at both the pre-primary and primary levels.

The curriculum of the Primary Education Sciences aims at developing subject-related and pedagogical knowledge and skills for prospective teachers to enable them to plan, assess and adapt their teaching to different groups of students (e.g., in terms of age, proficiency level, skill, social and cultural background). Within these programmes, students attend general teaching activities related to pedagogy, didactics, psychology, sociology, and anthropology, as well as specific teaching activities concerning the acquisition of i) discipline-related knowledge and skills, including the integration of special educational needs students and ii) knowledge within the fields of infantile neuropsychiatry, psychology, law, and health.

The subject areas that are the focus of the specific teaching activities include Italian language and literature, Mathematics, Physics, Chemistry, Biology, History, Geography, Sports, Arts, Music, Children's Literature, and the English Language. For the English language, prospective teachers are required to acquire level B2 of the Common European Framework of Reference for Languages (Eurydice, 2020).

On this view, ITE programmes reflect the Italian school curriculum in that they provide courses that are mainly subject-oriented. The subjects are undertaken not only in relation to the age of the students (pre-primary or primary); they also handle the most relevant issues that are not necessarily the object of instruction for young children.

4. Characteristics of Initial teacher education in Kosovo

As a country emerging from a war in 1999, Kosovo made significant steps in reforming the education system. Within these education reform efforts, teacher education has been placed at the forefront, and teacher education policy discourse has been characterised by continuous policy transfer processes with the aim of aligning Kosovo's teacher education policies with those of the European Union and the specific country models it deemed appropriate. Until 2002, Kosovo had a two-year post-secondary teacher qualification provision, which was placed within the University of Prishtina. In 2002, the requirement of a two-year higher education degree was replaced with a requirement of a four-year bachelor's degree, also marked by the establishment of the Faculty of Education at Prishtina's public university. This trend of increasing qualification requirements continued: in 2011, Kosovo introduced the minimum requirement of a master's level qualification for subject teachers and a bachelor's degree (240 ECTS credits) for pre-school and primary teachers (Saqipi, 2022).

The programming for primary school teachers consists of elements of subject content, pedagogical content knowledge and general education, which covers the psycho-pedagogical dimension for a teacher. Across the curriculum, there is a minimum of 25 ECTS dedicated to pedagogical practice. The primary teacher education curriculum also covers the concept of citizenship, but it is placed only within specific courses within the programme and largely focussed on one main course. This rather superficial treatment of concepts such as citizenship is one of the challenges and comes as a result of overemphasis on the content of traditional academic subjects (White & Saqipi, 2020; Saqipi & Rexhaj, 2020).

5. Methodology

5.1 Aim of the Study

Reflection on teachers' expected professional culture should address not only the initial teacher education programme provided but also how these curricula are able to change the beliefs and attitudes of future teachers. Indeed, professional action is influenced by beliefs acquired through programmes and prior experience. Investigating these beliefs can be relevant to understanding whether and how they can be modified over time. Therefore, in the initial education of teachers, attention should be paid not only to the transmission of role-specific knowledge, skills, and competences but also to the analysis and promotion of attitudes, beliefs, and values towards the profession. To promote democratic and inclusive teaching for an equitable and high-quality school system, teachers should be focused on the needs of each and every student, be capable of monitoring their learning process, individualising teaching, evaluating learning, and reflecting on one's professional actions in a view to continuous improvement.

This research aims to describe student-teachers' beliefs in Italy and Kosovo through the administration of an online questionnaire, drafted in English, translated into Albanian and Italian, and adapted to the different national contexts.

Additionally, the study seeks to investigate future teachers' attitudes toward reflectivity in teaching and possible associations with other beliefs, such as: the value of equality (i.e., teachers' ability to value students and their role in the management of classroom life, or the possibility of offering equal educational opportunities to all students, as opposed to a vision of the centrality of the teacher, who wields power and authority and only cares about a few); the value of freedom (i.e., freedom of expression and freedom of action of students and teachers); the role of natural endowments in learning, (i.e., if and to what extent students' failures are due to their in-born characteristics and not to teaching); the trust in the effectiveness of teaching in aiding learners to improve (i.e., teachers are open to change and confrontation, recognise students' diversity, and promote equity in outcomes); the reliance on formative evaluation and assessment for learning as a good strategy to involve students and increase their achievement levels, or motivations they have in becoming a teacher oriented toward solidarity towards learners and society in general.

5.2 Participants

To understand if and to what extent any difference can be found in the beliefs and attitudes of future primary school teachers in Italy and in Kosovo, a set of participants was obtained in each country among the students enrolled in the master's degree courses for primary teachers.

The online questionnaire was administered during the second semester of 2022, both in Italy and in Kosovo. Participation in the study was voluntary, and anonymity was preserved both in the data collection and in the analysis stage.

In Italy, the administration of the questionnaire took place through the electronic bulletin board of the university pedagogical practice to the students from the second to the fifth years of the master's course. Students of the first year were intentionally not included in the sample as they had not yet started their pedagogical practice.

In Kosovo, the survey was sent to all students of the bachelor-level studies in primary and pre-primary teacher education programmes. The survey was administered electronically.

Convenience sampling produced 299 participants in Italy and 83 participants in Kosovo. Even if a non-probabilistic sample does not guarantee the representativeness of results, data collected can be paired per quota with the population considered on the main background variables. In Italy, the sample represents 29.9% of the entire group of students enrolled from Year 2 to Year 5, with a similar ratio of male presence, around 3%, and with a similar average age (27.6 SD 7.4 in the sample, against the 27.9 SD 5.6 of the population). Similarly, in Kosovo, the sample represents around 20% of the entire group of students considered.

5.2 Instrument description: the questionnaire

A survey questionnaire on the democratic values, beliefs, and attitudes of student-teachers was developed, constructed from the analysis of instruments used and validated in previous research (Ciani, 2019; Hall-Simeral, 2017; Shechtman, 2002).

The instrument consists of a total of 54 items on a four-point Likert scale (agreement or importance), divided into the seven areas presented and showed good or very good reliability (Table 1).

Table 1. Scales' reliability (N = 348)

Scale	No. of items	Cronbach's Alpha
Equality	9	0.74
Freedom	14	0.72
Ideology of natural endowments	6	0.69
Motivation	7	0.72
Trust in teaching	4	0.68
Reflexivity	10	0.76
Formative function of evaluation	4	0.85

The scale of teachers' democratic beliefs developed by Shechtman (2002) is divided into three dimensions, which correspond to the values of Equality, Freedom, and Justice. Only the items relating to equality and freedom were selected for the construction of the instrument as considered most relevant to the aims of the present study and in order to reduce the length of the instrument.

In Ciani's study (2019), the democratic beliefs of future teachers are considered in terms of pedagogy choices and teaching activities aimed at promoting democracy. The construct of democratic beliefs for teaching is thus investigated

by means of three scales (i.e., Ideology of Natural Endowments, Trust in Teaching Effectiveness, and Formative Function of Evaluation), which were included in the instrument.

Democratic beliefs determine a view of the usefulness and dynamicity of teaching design-related activities, which is based on planning and reflective skills. For this reason, an additional section on reflective capacity has been added, consisting of questions constructed from Hall and Simeral's self-assessment tool for teachers' reflectivity. These questions connect with the previous scales in that reflexivity underpins trust in teaching and the formative diagnostic function of assessment and takes into account democratic values such as equality and freedom.

Reflexivity is the basis not only of an improvement-oriented pedagogical practice but also of a conscious teaching professionalism, in which the teacher reflects on its own convictions and explicates its implicit theories of action. The teacher is a reflexive professional (Schön, 1983) who reflects before, during, and after teaching and learns from experience; this reflexivity is the basis of his or her propensity for change and continuous professional improvement.

Future teachers' democratic beliefs will influence their pedagogical practices; democratic teachers promote a classroom climate that is open to discussion, self-expression, and participation and respectful of differences; they use flexible teaching strategies and evaluate from a formative perspective; they continually reflect on their professional actions with a view to lifelong learning.

In addition to the previous scales, a further 7 items were included on motivational factors that determined the choice to enrol in a degree course for future teachers, adapted from the 2018 OECD-TALIS survey's Teacher questionnaire, with level of importance on a 4-point scale (Ainley, Carstens 2018). Specifically, items included were: 1) Teaching provides access to a stable career path; 2) Teaching provides an income you can rely on; 3) Teaching is a secure job; 4) The timing of the teaching profession (e.g., timetables, holidays, part-time access) fits in well with family commitments; 5) Teaching allows you to contribute to the development of children and young people; 6) Teaching provides the opportunity to help socially disadvantaged people; 7) Teaching provides the opportunity to actively contribute to the improvement of society. These items were grouped into two separate sub-dimensions: motivation for individualistic purposes (first four items, Alpha = .77) and motivation for altruistic purposes (last 3 items, Alpha = .71).

Finally, in order to measure data quality and the coherence of answers, two attention-check questions were added. Such checks aim to distinguish between those who supply high-quality responses and those who provide unreliable or low-quality information. This reduced the sample from 382 individuals to 348.

6. Findings

The Italian and Kosovan samples depict two slightly different average students as far as background variables. The majorities of respondents were female in both countries, even if there was a higher but not significant percentage of males in Kosovo (8.8% against 3.2% in Italy). Despite the fact that there was a higher rate of foreign students in Italy than in Kosovo (6.1% against 1.5%), this difference was again not significant.

As mentioned in the previous paragraph, the Italian students were, on average, five years older than the Kosovans; nevertheless, it has to be pointed out that whereas the Italian sample had almost exclusively students enrolled from Year 2 to Year 5, in Kosovo the four years were considered in their entirety (Figure 1).

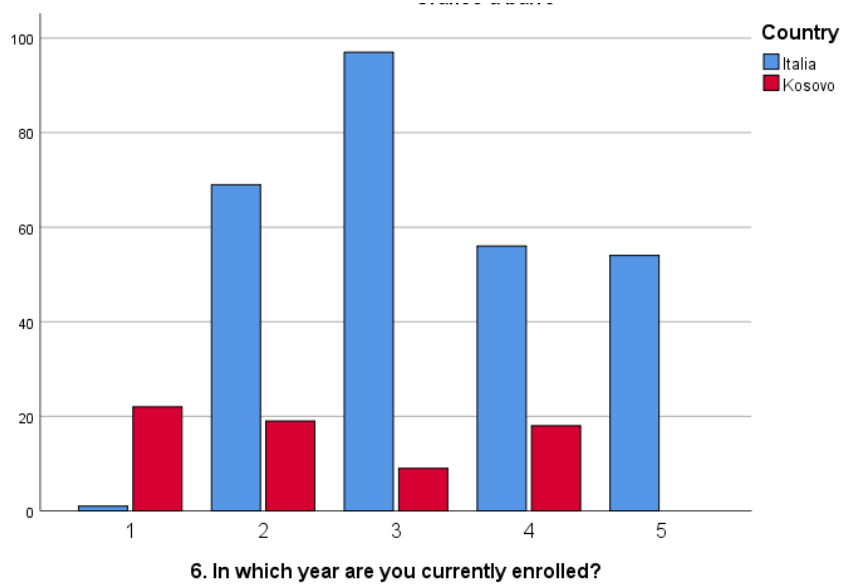

Figure 1. Number of students per year (N = 348)

The first visible dissimilarity between the two samples can be found in the first year of enrolment at university, even if in a different course or university than the current one (Figure 2). In Italy, the first enrolment year can be dated back to 30

years ago (1993). This scenario is more frequent than in Kosovo, where cases of older students with other experience of tertiary education are sporadic and go back to a maximum of 20 years.

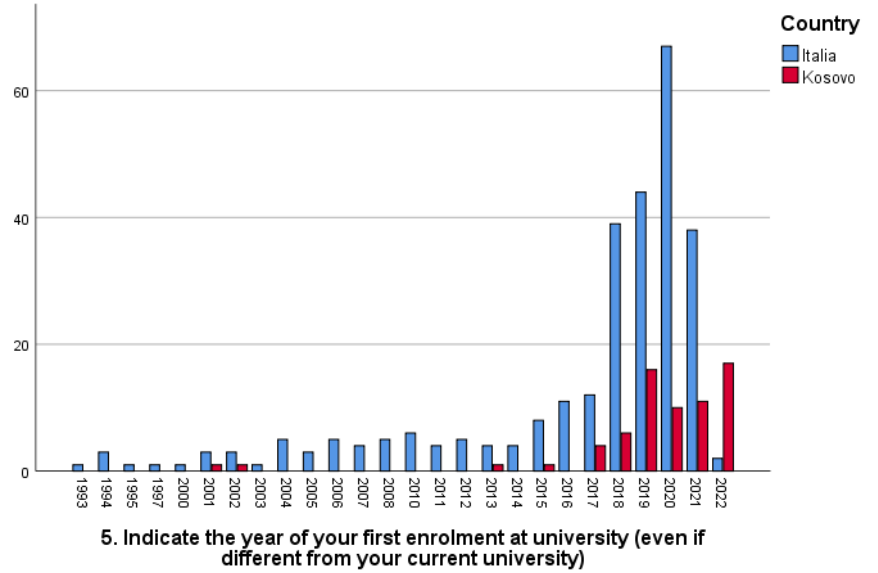

Figure 2. Number of students per first enrolment year (N = 348)

This mirrors the fact that Italian students already have another degree (41.8% against 14.7%). Finally, Italian students have extensive experience in school teaching (77.4% had between 6 months and 3 years of experience, against 28.1% in Kosovo).

Almost all of the respondents in Italy (95.3%) disagree that authority and power are the most important characteristics of effective teachers, against the 57.4% of Kosovan respondents. This statement of principle, however, is not matched by an equally high degree of disagreement when it comes to respect for adults: 46.5% of Italian respondents believe that students 'must be guided to respond to teachers' requests because they must learn to respect adults'.

Results on the average scales' scores show some differences between the two countries (Table 2), which are statistically significant for the scales Equality ($t(346)=6.51$, $p<.001$) and Ideology of Natural Endowments ($t(346)=6,66$, $p<.001$).

Table 2. Scales means per country (N = 348)

Scale	Country	Mean	SD	Minimum	Maximum
Equality	Italy	**3.06**	0.45	1.44	4.00
	Kosovo	**2.65**	0.49	1.44	3.56
Freedom	Italy	2.97	0.37	1.93	3.71
	Kosovo	2.71	0.41	1.64	3.79
Ideology of Natural Endowments	Italy	**3.35**	0.44	1.33	4.00
	Kosovo	**2.95**	0.48	1.50	4.00
Motivation to Become a Teacher	Italy	3.36	0.42	2.29	4.00
	Kosovo	3.57	0.33	2.71	4.00
Trust in Teaching	Italy	3.35	0.51	1.00	4.00
	Kosovo	3.46	0.53	2.00	4.00
Reflectivity in Teaching	Italy	3.28	0.39	2.00	4.00
	Kosovo	3.31	0.41	2.00	4.00
Formative Function of Evaluation	Italy	3.48	0.54	1.00	4.00
	Kosovo	3.51	0.51	2.00	4.00

Note. Statistically significant data are in **bold.**

It can be interesting to point out some differences in specific items for each scale for descriptive purposes. In the Equality scale (Figure 3), it can be noted how the idea of an authoritative teacher is far from the Italian context, whereas it is still strong in Kosovo (Item 1). Similar patterns can be found for Item 5 (students should not be included in decision-making processes regarding the curriculum) and Item 14 (circle arrangement of the seats in the classroom should be avoided to limit students' interactions), with Italian respondents showing higher levels of openness.

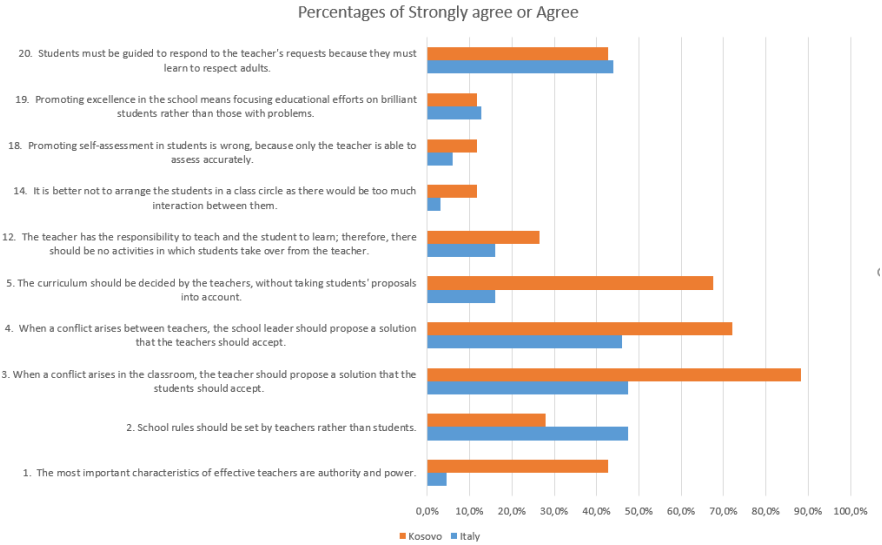

Figure 3. Percentages of responses per category (Equality scale) (N = 348)

In the Freedom Scale, fewer differences can be noted (Figure 4). Also, in this case, the idea that textbooks can be criticised by students is supported in Italy but less so in Kosovo (item 6), as well as the criticisms made by teachers towards the school they are teaching in (Item 9) and the use of participatory teaching strategies and tools, such as the learning contract (Item 16).

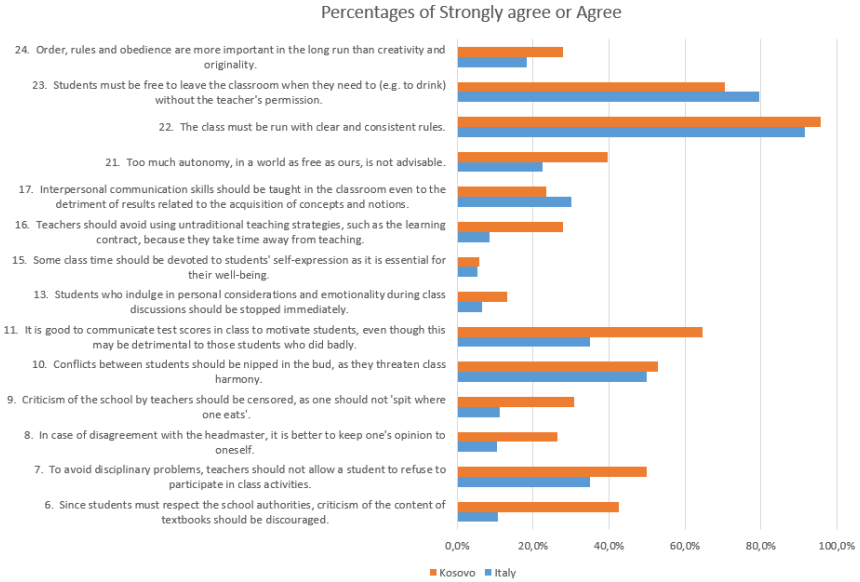

Figure 4. Percentages of responses per category (Freedom scale) (N = 348)

For the scale related to the Ideology of natural endowments (Figure 5), differences generally show a greater acceptance of the idea of gifted students in Kosovo, whose results can be predicted from the beginning (Items 30 and 26) and can represent a strong obstacle to teaching effectiveness (Item 25).

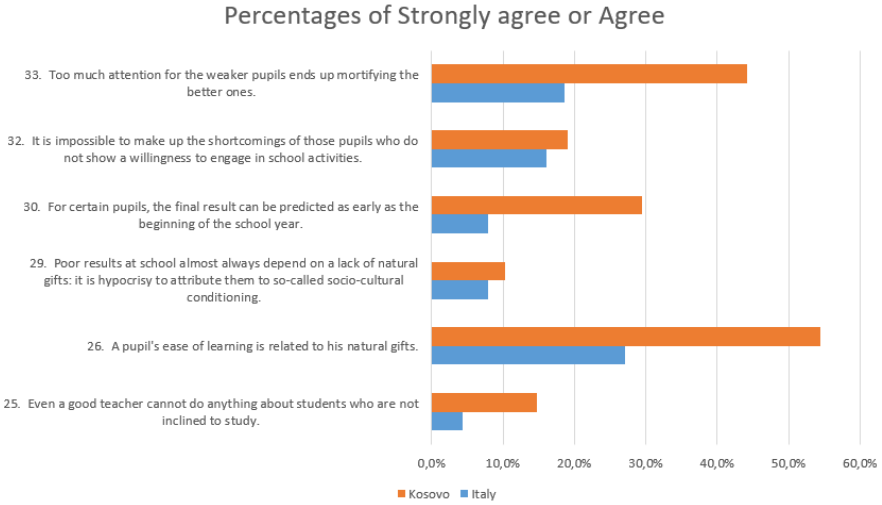

Figure 5. Percentages of responses per category (Ideology of natural endowments) (N = 348).

Quite similar are the answers of future teachers both in Kosovo and in Italy for the Trust in Teaching Effectiveness Scale (Figure 6), which are generally lower than in the other scales

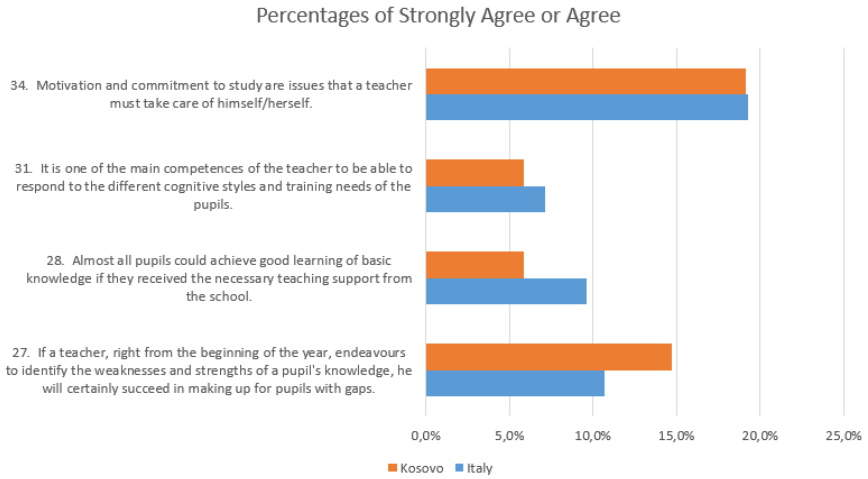

Figure 6. Percentages of responses per category (Trust in Teaching) (N = 348)

The percentages of agreement for the Formative Function of the Evaluation Scale are even lower (Figure 7) and, again, very similar between the two groups.

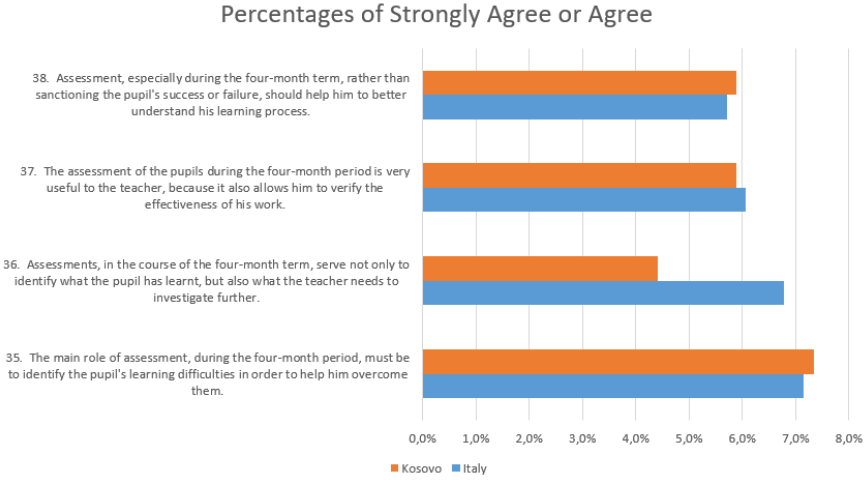

Figure 7. Percentages of responses per category (Formative function of Evaluation) (N = 348)

In relation to the last scale considered, the Reflective-self Assessment tool (Hall, Simeral, 2017) presents some distinctions and a more varied response pattern (Figure 8). In Item 44, Italian future teachers show their agreement with the idea of preparing in advance questions to propose to their students during lessons. The difference is the point of view with respect to addressing students' problems: Kosovans prefer to do this immediately, whereas the Italian future teachers seem to be more reluctant to do so.

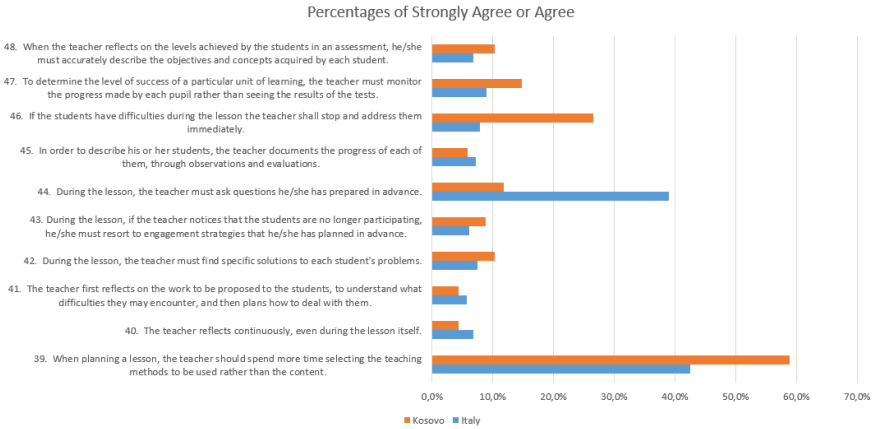

Figure 8. Percentages of responses per category (Reflectivity) (N = 348).

When analysing correlations between all scales considered and the Reflectivity in Teaching scale as an expected positive attitude into future teachers, it can be noted in both countries an evident and significant correlation between Reflectivity in Teaching and: 1) Trust in teaching, 2) Formative function of evaluation, and 3) Altruistic motivation to become a teacher (Table 3).

Table 3. Correlations with Scale Mean for Reflectivity in Teaching per country (Italy N = 280, Kosovo N = 68)

Scale	Country	Pearson correlation	sig.
Equality	Italy	0.188	0.001*
	Kosovo	-0.131	0.143
Freedom	Italy	0.169	0.002*
	Kosovo	-0.124	0.156
Ideology of Natural Endowments	Italy	0.324	0.000*
	Kosovo	-0.038	0.380
Formative Function of Evaluation	Italy	0.562	0.000*
	Kosovo	0.574	0.000*
Trust in Teaching	Italy	0.594	0.000*
	Kosovo	0.546	0.000*
Individualistic Motivation to Become a Teacher	Italy	0.067	0.130
	Kosovo	0.350	0.002*
Altruistic Motivation for Becoming a Teacher	Italy	0.340	0.000*
	Kosovo	0.268	0.014*

Note.* p<.05.

Furthermore, it has to be noted that Equality and Freedom are positively associated in both countries (respectively r(279) = .75 p<.01 in Italy and r (67) = .69 p<.01 in Kosovo), as well as Freedom and Ideology of natural endowments (r(279) = .52 p<.01 in Italy and r (67) = .52 p<.01 in Kosovo).

Given that, other than describing the possible differences between future teachers in two national contexts, this study also seeks to investigate the effect of future teachers' beliefs on their dispositions towards Reflectivity in teaching, Trust in Teaching Effectiveness, Formative function of Evaluation and Altruistic Motivation to become Teachers, as evidently associated in both countries to Reflectivity, will be considered. Both mean and sums of points in each of the scale and independent variables considered were normally distributed (George & Mallery, 2010). Thus, the following hypotheses are proposed.

H1: There is a significantly positive impact of future teachers' beliefs on Trust in Teaching Effectiveness on their Reflectivity.

H2: There is a significantly positive impact of future teachers' beliefs on the Formative Function of Evaluation on their Reflectivity.

H3: There is a significantly positive impact of future teachers' beliefs on Motivation to Become Teachers on their Reflectivity.

The dependent variable (Reflectivity) was regressed on predicting variables (Trust, Formative function of Evaluation and Motivation scales). The independent variables significantly predict the dependent one F(3, 344) = 80.501, p <.001), which indicates that the three factors have a significant impact on Trust. Moreover, the R2 = .412 shows that the model explains 41.2% of the variance in the Reflectivity Scale.

Coefficients were further assessed to ascertain the influence of each of the factors on the criterion variable (Reflectivity). H1 evaluates whether beliefs on Trust significantly and positively affect Reflectivity. The results reveal that Trust has a significant and positive impact on Reflectivity (B = .264, t =6.135, p = .000). Hence, H1 was supported. H2 evaluates whether the Formative function of Evaluation has a significantly positive impact on Reflectivity (B =.219, t =5.436, p = .000).

Consequently, H2 was supported. H3 evaluates whether Motivation to become teachers has a significantly positive impact on Trust. The results show that Motivation has a significantly positive impact on Reflectivity (B =.128, t =2.938, p = .004). Hence, H3 was supported. The results are presented in Table 4.

Table 4. Hypotheses Results

Hypotheses	Regression Weights	B	t	p-value	Results
H1	TR ->RF	.264	6.135	.000*	Supported
H2	FE->RF	.219	5.436	.000*	Supported
H3	MO->RF	.128	2.938	.004*	Supported
R	.642				
F(3,344)	80.501				

Note.* p<.05. TR: Trust in Teaching; FE: Formative function of Evaluation, MO: Motivation, RF: Reflectivity.

Discussion and Conclusions

The purpose of this study was to compare and contrast student-teachers' attitudes in Italy and Kosovo using an online questionnaire and a set of pre-validated scales on concepts that underpin the idea of democratic citizenship in society. Furthermore, the study sought to investigate student-teachers' attitudes toward reflectivity in teaching and possible associations with other beliefs, such as trust in the effectiveness of teaching in assisting learners in improving, reliance on formative evaluation and assessment for learning as a good strategy to involve students and increase their achievement levels, or motivations they have in becoming a teacher oriented toward solidarity for learners.

The results depict two different educational contexts for future primary teachers. In both countries, the teacher role is still strongly more attractive for women than for men, as the vast majority of female enrolled students demonstrates. In Italy, a relevant ratio of students is not at their first experience in tertiary education, whereas this is the case for the majority of Kosovan students, highlighting that teaching was probably not the first-choice profession selected by respondents in Italy. The two samples also differ in terms of direct experience in teaching, as Italians generally have extensive possibilities to work at school during their university period, with all the difficulties and inconsistencies in the development of their professionalism that this can produce.

On the whole, future primary school teachers believe in the importance of reflexivity, confidence in teaching, and the formative function of evaluation as characteristic aspects of democratic teaching but show more uncertain beliefs with respect to the values of equality and freedom.

The relevance of reflectivity on teaching experience has been widely postulated in literature (Brookfield, 1995), and teachers' assumptions on their work can inhibit or enhance their possibility to interpret and reinterpret their implicit pedagogies, developing a self-confirming cycle in the first case or, in contrast, promoting a significant change in the latter. Thus, it is crucial, starting from initial teacher education, to understand the influence of these beliefs and dispositions on the possibility for them to stand outside themselves and determine if and to what extent these values lead them to distorted or at least constrained ways of being teachers. Specifically, the study showed, in the two contexts considered, that even if markedly different for tradition and cultural choices in the field of teacher education, the beliefs in trust in teaching to promote significant change in learners, on formative assessment effectiveness and a general motivation to become teachers oriented towards solidarity are good predictors of future teachers' disposition towards reflectivity practice. If it can be very challenging to significantly influence individual beliefs on a democratic culture for school and society, such as equality, freedom and assumptions on learners' natural endowments, a strong evidence-based set of knowledge and skills can be provided to future teachers on the effectiveness of teaching and formative assessment strategies, in order to create a positive disposition towards reflectivity practices.

Limitations of the study are to be found mainly in the non-probabilistic nature of the sample that does not allow, for instance, comparisons between respondents' enrolment years within countries. However, it has to be pointed out that the number of respondents in both countries allows us to describe the constructs considered. Additionally, it could be useful to compare expected and actual teachers' culture, specifically, the democratic beliefs of pre-service and in-service teachers in primary schools, to verify if and to what extent the working practice modifies them.

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Chapter 4: The challenges of developing STEAM teacher educators' identity

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Abstract

Continuous learning and professional development are essential to the high-quality performance of the increasingly important professional role of teacher educators. Science, technology, engineering, arts, and mathematics (STEAM) education is known as one of the promising practices involving interdisciplinarity, critical thinking, and creative problem-solving. The work of a STEAM teacher educator is challenging, given the multiple demands at multiple levels. Examining the identity of such teacher educators offers a broad and nuanced view of what it means to be one. The purpose of this study is to explore STEAM teacher educators' identity, including their professional and pedagogical competencies, their formal education, teaching qualifications, personal opinions related to pedagogical work, and to understand how they view the STEAM teaching and learning approach, the challenges of integrating STEAM into the curricula that guide their pedagogical practice, and to identify the factors that they believe have contributed significantly to their teaching expertise in the field of STEAM at the university level. Based on a qualitative research approach, 22 university STEAM teacher educators from 10 European and 4 non-European countries participated in this study. A semi-structured interview was used to gather information about formal education, personal experiences, opinions, and understanding of the STEAM teaching and learning approach. The results show that all teacher educators interviewed recognised the need to develop specific competencies as a very important element in the learning process. Teacher educators need to develop their professional and pedagogical competencies so that they can help students best achieve their learning goals. Many of them do not have experience with the STEAM approach and do not have programmes and courses related to STEAM education. Based on the research conducted, we can draw conclusions about the desire to train STEAM competencies of teacher educators who teach STEAM subjects and are able to train STEAM competencies of student-teachers.

Keywords: STEAM teaching and learning, university level, professional competencies, teaching qualifications.

1. Introduction

With the constant development of science and technology, bodies of knowledge are constantly increasing, and many new complex problems need to be addressed. These problems often cannot be solved by a single discipline and require comprehensive analysis and a creative approach. The concepts of interdisciplinary approach play a key role in education. Integration takes place at the levels of disciplines, forms of education, methods of organising educational activities and forms of interaction between participants in the educational process (Dorofeeva et al., 2020). Therefore, there is a growing global need for professionals who are able to bring together different disciplines to solve these problems by creatively integrating their knowledge, making decisions, and solving problems with many unknowns in a changing, unstable environment (Tytarenko et al., 2021).

One of the most promising practices for educating such professionals, using the concept of interdisciplinarity, integration with critical thinking, and creative problem-solving is STEAM education, which includes science, technology, engineering, arts, and mathematics as access points for fostering the development of 21st-century skills for tomorrow's citizens (Yakman & Lee, 2012). STEAM is a reconceptualisation of STEM (Science, Technology, Engineering, and Mathematics). The acronym STEAM stands for the integration of art (A) and creativity in classical STEM teaching. It aims to upgrade science education with creativity by making it more attractive and, in this way, counteracting the bad reputation of science education as abstract, difficult, or even boring (Henriksen, 2014). While STEM focuses more on mathematics and science, STEAM offers teachers and students the opportunity to expand their knowledge in the sciences and humanities while improving skills needed for 21st-century development (Quigley et al., 2017). However, the main difference between STEM and STEAM is that STEAM involves a transdisciplinary approach in which authentic problems are solved and provides a better understanding of how all disciplines are connected (Bequette & Bequette, 2012). Continuous learning and professional growth are essential to the high-quality performance of the increasingly important professional role of teacher educators. Professional development can provide STEAM teacher educators with opportunities to learn how to effectively integrate multiple teaching approaches into their education (Avery & Reeve, 2013).

2. Theoretical Background

The role of the teacher educator is to educate student-teachers who will respond to the needs of the national education system and influence the nature and quality of their learning and performance. For this reason, education systems and institutions that deal with teacher education around the world are interested in teachers who invest time and effort in their professional development throughout their careers (Shagrir, 2011). Beliefs about teaching and being a teacher are the fundamental part on which a teacher's identity is based. However, these beliefs are constantly changing and evolving based on personal and professional experiences (Grier & Johnston, 2009).

The study of teacher-educator identity provides a broad and nuanced view of what it means to be one. Teacher educator identity is determined by a variety of factors, such as personal experiences, personal and pedagogical beliefs, and professional, sociopolitical, and cultural dimensions (Watson, 2006). Therefore, the development of a teacher educator's identity is an ongoing construction process in one's professional life that includes social, personal, and professional experiences (Rodgers & Scott, 2008). Teacher educator identity development is a dynamic, ever-changing, and active process that evolves over time through interaction with various political, school, and educational environments and those who work in those environments (Schutz et al., 2018). New identities develop as a result of the interaction between teacher educators' personal experiences and the new teaching situation or context in which they are placed (Akkerman & Meijer, 2011; Watson, 2006). Therefore, research on teacher identity considers professional, personal, academic, and social aspects in addition to teachers' roles in school (Beijaard et al., 2004). The literature on teacher educator identity reveals a difference in viewing teacher educator identity as either a process of professional development through the accumulation of assets or the growing interest in the personal or individual characteristics inherent in each teacher (Beauchamp & Thomas, 2009).

The literature reveals that teacher educators face challenges, tensions, and doubts about their ability to fulfil their role as teacher educators during their induction into higher education (Khan, 2011; Murray, 2005, 2010; Murray & Male, 2005; Williams & Ritter, 2010; Wood & Borg, 2010). This is primarily due to the lack of continuous and sufficient support programmes and the limited effectiveness of existing programmes (Izadinia, 2014). Many authors emphasise that induction programmes for new teacher educators should function as supportive learning communities (Khan, 2011; Murray. 2008, 2010; Murray & Male,

2005; Williams & Ritter, 2010). An important aspect of a learning community is building collaborative and collegial relationships among participants, which play an important role in clarifying teacher educators' identities (Murray, 2005; Williams & Power, 2010; Williams & Ritter, 2010).

Another vital part of teacher education and teacher educator development is the recognition of various factors that construct identity, that is, a reflection that facilitates learning and identity construction by specifically examining teacher educator practice and identity (Williams & Power, 2010). Murray (2008) and Williams and Power (2010) indicated that reflection is strongly recommended to enhance teacher educators' own professional learning and identity.

Teachers' professional identity, the way they define themselves internally and externally, is a form that develops over time and contributes to the teacher's individual abilities but is also influenced by many factors (Lasky, 2005). Teacher identity encompasses various segments, such as knowledge, beliefs, self-efficacy, and social affiliation (Drake et al., 2001). Teacher professional development is about the processes and activities that encompass teachers' individual, professional, and social dimensions, and it is also a progression of teachers toward critical, independent, and responsible decisions and actions (Valenčič Zuljan, 2001). It aims to improve teachers' professional knowledge, skills, and attitudes so that they, in turn, can improve the learning of target groups (Guskey, 2002). Processes and activities aimed at enhancing professional knowledge are particularly important when they focus on methodology rather than subject matter, as teachers are expected to align their practices with 21st-century skills to meet students' needs (Yue, 2019). Flexible instructional practices are needed to help teachers better adapt to current environmental, social, and economic challenges (Hensley, 2018).

The work of a STEAM teacher educator is challenging given the multiple demands at different levels, such as curriculum design and implementation, knowledge of best practices, and addressing social issues (Slavit et al., 2016). To be successful in this field, STEAM teachers need to possess certain characteristics, such as engaging in continuous professional development, being open to change, seeing failure as an opportunity to learn, and believing in the need to provide equitable and inclusive learning opportunities for all students (El Nagdi et al., 2018).

In the process of teacher education, 15 specific competencies are emphasised, which are also described as skills, awareness, knowledge, and interest; some of which are general, overarching competencies, such as research skills or

advanced cognitive skills for developing and creating knowledge (Caena, 2011). Therefore, to account for the complex, multifaceted nature of teaching and to acknowledge the role of values, competency descriptions should be clear and not overly detailed (Conway et al., 2009). One of the most important tasks of a STEAM teacher educator is professional competence (Blaskova et al., 2015). These include planning strategies, various teaching methods and mechanisms for introducing new teaching methods, mastery of teaching materials, ability to create teaching and learning programmes, ability to manage classes, ability to evaluate student performance, knowledge of counselling programmes and services, ability to conduct educational research, etc. (Pongkendek et al., 2021). A significant amount of professional knowledge, including pedagogical content knowledge, is essential for being a successful teacher educator. In addition, continuous learning and development of pedagogical skills are also important for teacher educators' professional development (Okolie et al., 2020).

Teachers' professional knowledge is an essential aspect of teacher knowledge (Alonzo et al., 2012). The concept was first introduced by Shulman (1986), who distinguished between content knowledge (CK), pedagogical knowledge (PK), and pedagogical content knowledge (PCK). PCK is the knowledge required to make the subject matter accessible to students (Shulman, 1986) and helps teachers design constructive lessons (Chapoo et al., 2014). PCK also requires teachers to combine their knowledge of content selected for instruction (CK), their pedagogical knowledge related to content (PK), their knowledge of students in a particular subject, and their knowledge of how to present content. Geddis (1993) reported that a well-developed PCK is essential for an effective teacher educator because it enables him or her to recognise the importance of students' understanding of subject matter and to be able to use various teaching methods and instructional strategies to develop students' concepts related to the subject matter.

STEAM teacher educators have special needs, and there are few studies on the professional development of teacher educators (Even, 2008). Regardless of discipline, all STEAM teacher educators require ongoing professional development throughout their careers that specifically focuses on their PCK (i.e., knowledge of learners, curriculum, instruction, and assessment) (Abell et al., 2009; Gess-Newsome, 2015) and instructional practice (Grossman et al., 2009). Phuong et al. (2018) conducted a systematic review of teacher educators' professional development, and the results showed that the majority of teacher educators' professional development focused on the pedagogical aspects of the role, such as integrating technology and developing or refining pedagogical

skills (Phuong et al., 2018). As reported in several studies (Großschedl et al., 2019; Kavanoz et al., 2015; Kuntze et al., 2013), teacher educators' perceptions can be considered an important indicator of their PCK. The results of several studies (Nilsson, 2008; Nilsson & Van Driel, 2011) have shown that in order to support teachers' PCK development, it is important to understand their own perceptions of the knowledge required for teaching.

As an extended form of Shulman's (1986) work on pedagogical content knowledge, Mishra and Koehler (2006) then introduced the concept of technological pedagogical content knowledge (TPCK), which describes the integrative knowledge base teachers need to effectively teach PK with technology. It also encompasses the dynamic interactions among technological knowledge (TK), PK, and CK (Mishra & Koehler, 2006). TK refers to knowledge about integrating various technologies (Koh et al., 2010) to enhance student learning and recognise the power of educational technologies to be used in the classroom. A competent STEAM teacher educator should have all levels of knowledge (e.g., pedagogical, technological, and appropriate content knowledge), all of which are integrated into a complex TPCK (Mishra & Koehler, 2006).

The study conducted by Carrier et al. (2017) examines the effects of background, memories of science and science teaching, characteristics of elementary teacher preparation aligned with STEM, and experiences on elementary teachers' identity formation. The findings suggest the importance of addressing reform strategies, pedagogical training, and additional knowledge to enhance professional development. As Avraamidou (2014) reported in her review of research on science teacher identity, research studies over the previous decade provided theoretical foundations for teacher identity research; however, the author pointed out that more research was needed in the area of science teacher identity. Avraamidou also recommends that researchers conduct longitudinal life history studies to uncover the experiences that contribute to the development and implementation of science teacher identity. El Nagdi et al. (2018) conducted a study to examine the evolving identities of STEM teachers in emerging STEM schools. They pointed out three main themes that characterise a STEM teacher's identity, such as the uniqueness of STEM teacher identity, professional characteristics, and personal characteristics of STEM teachers.

As reported by Akkerman & Meijer (2011), several characterisations of teacher identity. The most common ones relate to three main themes: 1) multiplicity of identity, 2) discontinuity of identity, and 3) the social nature of identity. In addition, El Nagdi et al. (2018) discussed each of these themes. The multiplicity of identity is related to 'sub-identities'. A teacher's professional identity is composed of various sub-identities related to the teacher's different contexts and relationships. The discontinuity of identity is an ongoing process of constructing, interpreting, and reinterpreting experiences (Beijaard et al., 2004). The last point, the social nature of identity, is related to the different social contexts and relationships in which teachers' identity develops. Alsup (2006) pointed out that identity is a construct that is developed in social-communicative contexts and for socially significant reasons. Teachers negotiate their professional identities through collaborative exchange, and colleagues are important actors in the formation of teachers' professional identities (Cohen, 2010).

3. Research problem

This qualitative study addresses the identity of teacher educators in the field of STEAM, working at different universities. The purpose of this study is to gain insight into the identities of STEAM teacher educators, including their professional and pedagogical competencies, to understand how teacher educators in the field of STEAM view the challenges of integrating STEAM into the curricula that guide their pedagogical practice, and to identify the factors that they believe have contributed significantly to their competence in teaching in the field of STEAM at the university level. The study also aims to obtain information about what support is still needed to become more successful teacher educators, what the STEAM teacher educators' opinion is about the relationship between the different levels of TPCK, who or what has influenced the STEAM teacher educators the most in their pedagogical qualifications, what are the STEAM teacher educators' opinions about other skills and knowledge they need to become a better teacher educator, how many and what in-service teacher professional development or other courses of education STEAM teacher educators have taken, and to what extent their work focuses on research and on teaching.

This study addresses the following research questions:

1) What is the formal education of STEAM teacher educators?

2) What are the teaching qualifications of STEAM teacher educators?

3) What is the opinion of STEAM teacher educators regarding their pedagogical work?

4) How do STEAM teacher educators view the STEAM teaching and learning approach?

4. Method

In this study, the qualitative descriptive pedagogical research method was used. Life history was applied as a research approach to examine the identity of university-level STEAM teacher educators.

4.1 Participants

A total of 22 STEAM teacher educators from 21 different universities in 10 European Union countries (Germany, Poland, Croatia, Hungary, Portugal, Italy, Czech Republic, Luxembourg, Austria, and Cyprus) and four non-European Union countries (United Kingdom, USA, Turkey, and Serbia) participated in this study. The STEAM teacher educators were experts in a particular field of STEAM, for example, science (chemistry, biology, and physics), technology, engineering, art, or mathematics. A total of three chemistry teachers, three physics teachers, three biology teachers, three technology teachers, four engineering teachers, one computer science teacher, two art teachers, and three mathematics teachers participated in this study. The participants formed a heterogeneous group of university teachers in terms of gender, work experience, academic/professional title, and age. All participants were employed full-time at the university. Teacher educators were also asked about their current employment status (e.g., 'What is your current employment status as a university teacher?', 'How many years of work experience do you have as a university teacher?', 'To what extent does your faculty work focus on research and teaching?' etc.). The detailed participants' information is shown in Table 1.

Table 1. Participants' information.

STEAM field	Number of participants
Chemistry	3
Physics	3
Biology	3
Technology	3
Engineering	4
Computer science	1
Art	2
Mathematics	3
Academic/professional title	
Full Professor	5
Associate Professor	4
Assistant Professor	13
Work experience as university teachers	
1–9 years	8
10–19 years	9
> 20 years	5

Distribution of workload	
More teaching than research	7
Equal distribution of teaching and research	8
More research than teaching	7

The university teachers had different profiles: a) university teachers teaching specific STEAM courses (8); b) university teachers teaching specific STEAM courses and involved in research in a specific field of STEAM education (8), and c) university teachers teaching specific didactics courses (courses on how to teach specific field of STEM in primary and secondary school) for student-teachers (6).

Teacher educators were also asked about their current employment status (e.g., 'What is your current employment status as a university teacher? ', 'How many years of work experience do you have as a university teacher?', 'To what extent does your faculty work focus on research and teaching?' etc.). In terms of academic/professional titles, there were five full professors, four associate professors, and 13 assistant professors. All participants were employed full-time at the university. Regarding their work experience as university teachers, eight of them had between one and nine years, nine had between 10 and 19 years, and five had more than 20 years of work experience as university teachers. Regarding the distribution of their workload, seven respondents have more teaching than research, eight have an equal distribution of teaching and research, and the rest (seven) have more research than teaching.

4.2 Instruments

This is a survey with interviews as the main instrument of the study. A semi-structured online interview with approximately 40 questions was used to collect data. The interview protocol was divided into four main content parts:

1. formal education (e.g., 'What is your educational background?'; 'What is the highest level of formal education you have completed?', etc.),

2. teaching qualifications (e.g., 'When did you have your first experience with teaching?', 'Did you complete an educational programme, or did you complete any programme or other courses in the field of education?', 'What

programme or other courses in the field of education have you completed: how many, duration, content, qualifications?', 'How did you obtain your initial teaching qualification (pedagogical and didactic qualifications?' etc.),

3. personal opinion related to pedagogical work (e.g., 'Why did you decide to teach a specific subject?', 'Was teaching your first career choice?', 'What is the relationship between pedagogical/teaching qualifications and knowledge in a particular subject area that a university teacher should have?', 'What is the importance of technological knowledge for university teachers?', 'Who or what has most influenced your pedagogical qualifications?', 'What other skills and knowledge do you think you need to become an even better university teacher?', etc.).

4. STEAM teaching and learning section was further divided into three sections:

a. knowledge and promotion of the STEAM field ('Do you know what the acronym 'STEAM' stands for?' 'Can you explain this acronym?', 'In your opinion, what is the added value of "A" in the STEAM approach?', 'Does your university/faculty support the idea of STEAM learning and teaching?', 'Does your university/faculty have a programme to improve and enhance STEAM learning and teaching or perhaps courses to train teachers STEAM teaching approach?', etc.),

b. the individual's competence in the field of STEAM ('In your opinion, how do you rate your own competence in STEAM teaching?' 'Do you consider yourself competent?', 'Have you participated in courses or programmes to improve your professional development in STEAM teaching?', 'Can you explain in a few words what kind of courses you have taken? At the university level?' How were these courses organised, how long did they last, etc.?', 'Do you feel that you currently need a professional development course to teach and understand STEAM teaching approach to your subject(s)?', 'What do you feel are the most important things that would improve your competence in teaching STEAM?', etc.), and

c. personal experiences and opinions ('What do you think are the key competencies that students acquire through the STEAM teaching and learning approach?', 'Do you implement the idea of the STEAM/STEM teaching and learning approach in your lectures/courses?', 'How do you introduce the idea of the STEM/STEAM teaching and learning approach to your students?', etc.).

4.3 Research design and data analysis

The interviews were conducted with 22 participants and consisted of three distinct parts: the introduction, the main phase (which included four main parts), and the debriefing. The briefing and debriefing were not recorded. In the introductory phase, the interviewer explained the purpose and process of the interview (duration, use of the audio recorder, etc.). Teacher educators consented to the use of the audio recordings for research purposes and were informed of their right to stop the interview at any time.

The individual one-hour interviews were audio recorded, and the data obtained were later fully transcribed. The transcripts were read repeatedly to obtain an overview of the interviews. Based on the transcripts, summaries per question and per teacher educator were written in English. The transcribed data were qualitatively analysed using content analysis and edited according to the coding of the teacher responses. Participants' interview responses were coded using a coding table. A set of contextually relevant words (codes) was determined in each set of responses to the questions. The interview responses were divided into different categories consisting of the same or very similar codes. To ensure high reliability of the categorisation, two researchers (two of the authors of this chapter) independently evaluated all transcripts a second time using the code table, resulting in an overall repeat rate of 95%. Both evaluations were then compared at points where differences appeared, and after consideration, the more appropriate evaluation was chosen. All interviews were processed anonymously after audio recording by assigning a code to each interviewee.

5. Findings and Discussion

Our study aims to examine the identity of teacher educators in the specific field of STEAM (science - chemistry, biology and physics, technology, engineering arts and mathematics) working in different universities around the world. Insight into the life history of a teacher educator provides an overview of the identity, pedagogical and professional competencies of teacher educators in the specific field of STEAM and identifies the factors that they believe played an important role in making them feel competent to teach in a specific field of STEAM. The study also aims to obtain information about what competencies they believe they still need to develop in order to become more successful in their teaching profession. Therefore, the interview questions were divided into four main sections to gain insight into the identity of STEAM teacher educators.

5.1 The Teacher Educators' Formal Education

The first section of questions was related to the formal education of interviewers, and the third was related to the teaching qualifications of interviewers. The results show that the interviewees' education is related to their professional field. The teacher educators teaching specific STEAM courses had no pedagogical education. Overall, eight (three mathematicians, one biologist, one physicist, one artist, and two engineers) of the 22 teacher educators interviewed had no educational background, and most of them had not attended any educational programmes or courses. They indicated that the only requirement to teach at the university was to be enrolled in a doctoral programme and then to earn a PhD and that they never had the need or obligation to take courses in education. Those who had taken courses acquired their teaching qualifications through regular concurrent education, regular study at the faculty of education, which is responsible for educating and teaching undergraduates, and short courses in education as part of their employment at the university.

Teacher educators who teach specific STEAM courses and are also involved in research education in a particular area of STEAM also tend not to have pedagogical education. Only one respondent (teacher educator in engineering) completed his pedagogical education with a PhD in engineering education. Others, seven in total (one physicist, one biologist, one computer scientist, two engineers, one technologist, and one chemist), attended short courses. These were the following:

- two-year course: postgraduate certificate in education (learning and teaching in tertiary education),
- two-semester course (Pedagogy, Methodology, Didactics) aimed at informing participants about learning theory and aligning it with pedagogical practice,
- 'Teacher competencies in tertiary education: learning and teaching' - duration: about one month, a formal course, a certificate at the end of the course, worth 10 ECTS,
- 'Defining learning outcomes and their alignment with other elements of the teaching process: curriculum competency approach in higher education' - duration: 4 hours (online), one formal course with a certificate,
- professional development on teaching methods and student assessment; 28 hours of core modules and 8 hours of elective modules,

- laureate faculty development - Digital teaching and learning programme - Track 2, Blended Design and Instruction (16 modules),
- in-service professional development programme - 'From conventional to online instruction: building and setting up your e-invigilate',
- 'New teaching methods and technologies' - duration 48 hours, a certificate,
- one-year pedagogical course for tutors. The certificate allows teaching students at the university level,
- teaching courses on the methodology of teaching (two semesters, including lectures, seminars, laboratory, and pedagogical practice in school), didactics (1 semester), psychology (1 semester) and pedagogy (1 semester).

5.2 Teaching Qualifications of Teacher Educator

The respondents in this group acquired their teaching qualifications as a postgraduate certificate in pedagogy, in parallel with a doctorate, as a special pedagogical programme, as a pedagogical fast-track course by a senior professor of the subject. One emphasised, 'I learned everything on the job by talking to colleagues, attending webinars, and collecting ideas. None of my jobs have ever required proper pedagogical preparation.' Another said, 'Based on my experience as a university teacher for more than 11 years and also through feedback from other experienced professors.'

In contrast, all teacher educators, six in total (one physicist, two biologists, one artist, and two chemists), who mainly teach didactic subjects, have basic pedagogical education. They obtained their pedagogical qualification with a PhD in pedagogy or didactics. One interviewee said: 'If you graduate from a teacher education department, you already have pedagogical training along with part of your degree, so you are eligible to be a teacher.' The majority of respondents in this group attend in-service programmes, courses, or seminars in education (e.g., seminars on university teaching, new teaching methods, etc.).

The importance of teachers' pedagogical competencies has been reported by various authors (Fakhrutdinova et al., 2020; Merkt, 2017; Okolie et al., 2020). In general, they found that a lack of attention is given to pedagogical competencies, and the insufficient research that could present the importance of these competencies are major problems. Fakhrutdinova et al. (2020) pointed out that teachers' pedagogical competencies are the consequence of pedagogical training, noting that almost three quarters of university teachers do

not have adequate pedagogical education. In line with these findings, Okolie et al. (2020) highlighted the need for continuous pedagogical development of already established university teachers. University teacher educators should have pedagogical education because pedagogical knowledge is an important factor in planning instructions at the university. In addition, research has shown that insufficient attention is often given to teachers' identity formation during their graduate studies (Dinkelman et al., 2006; Murray & Male, 2005) and that pedagogy is even more important for university teachers teaching in educational programmes.

5.3 Teacher Educators' Opinion related to their Pedagogical Work

The third section of the questions was related to the personal opinions of the respondents. The results related to their decision to become university teachers show that the majority of the respondents liked their subject and wanted to teach it, especially since they were children. Teacher educators who teach certain STEAM subjects mentioned some reasons for their decision to teach, such as 1) Contractual obligation and good match with my research interests; 2) Part of academic duties; 3) 'Since I was a student, I like to teach young students and help them apply the methodology in their future study and professional development, etc.'.

Teacher educators who teach specific STEAM courses and are also involved in research education in a specific area of STEAM pointed out, 'My personal interests overlap with the needs of my department' and 'I chose to teach these courses because we need to balance the content and provide students with the skills, they need to enter the workforce.'

Teacher educators who primarily teach didactic subjects gave other reasons why they teach: 'I find the subject fascinating and important for the students', 'Purely by chance. I did not originally intend to become a teacher'.

For most of the teacher educators interviewed, teaching was their first career choice. For others, the answers were different, for example, 'Teaching was not my first career choice, but I got a chance to do a doctorate in the field and started teaching there with my diverse background', 'I was offered a position as a researcher, and I also got a grant to do a doctorate, and then they were looking for an assistant, and that's how my role as a teacher educator started'. The interviewees had their first teaching experiences mainly as doctoral students. Some of them are also tutors in courses.

The interviewers were also asked to comment on the relationship between pedagogical qualifications (pedagogical content knowledge and pedagogical knowledge) and knowledge in a particular subject area (content knowledge) that a university teacher should possess. All respondents emphasised the great importance of both. They justified their views as follows:

'Deep expertise in a subject knowledge greatly strengthens pedagogical skills and broadens the range; a school teacher whose knowledge is limited to what is required to cover the formal school programme, for example, will not be able to teach students at a level appropriate for subsequent university study.'

Another added, 'Both of these qualities are very important for a good university teacher to improve student outcomes. A good teacher should have professional, subject-specific, and personal competencies that are developed to the same degree (at a high level), and they should be high-achievers and motivated in their professional development, which never stops at either level. From my personal experience as a student and teacher, I can say that a great expert is not of much use if he does not know how to incorporate comprehensive pedagogical content knowledge, appropriate teaching methods, problem-solving strategies, adaptation to diverse learners, perception of what is happening in the classroom, and sensitivity to the teaching context and students.'

Furthermore, 'It is very important for a teacher to acquire not only knowledge in a particular area of teaching but also pedagogical knowledge that will help him or her to teach the students the content to be taught in the most appropriate way.'

One of the teacher educators from the group of biology teachers who mainly teaches didactic subjects shared the following thoughts: 'The basis is sound biological knowledge and also meta-knowledge about biology as a discipline; and then knowledge about the learners, how do they approach the learning field, what do they already know - that needs constant observation, communication, that the teacher can change the learning setting, the examples chosen, the strategies, ... to be flexible, you need methods, a repertoire of strategies, examples ... and openness to change in the classroom. Often, the learners, with their questions and discussions, control the teaching sequence to the same extent as the teacher with his plans for the sequence. There is an ongoing negotiation in the classroom/setting that requires the participation and engagement of both parties.

PCK is primarily the reflective repertoire of communicating a particular content knowledge, finding meaningful explanations, representations, and metaphors, and also making learners aware of their own role in addressing the issues.‘

However, there were also some individuals who believed that there was no connection between pedagogical qualifications and knowledge in a particular subject. They explained their opinion as follows: ‘You can know a lot about a subject and be a bad teacher. You can know nothing about a subject and still be a good teacher’ or ‘Having enough knowledge for teaching is a necessary thing. But we cannot say that there is necessarily a direct relationship between the teacher’s level of knowledge and the quality of teaching.’ Such views can be dangerous, because understanding the subject is important for teachers at all levels of education to teach the content to students with a sound understanding and without misconceptions in a way that stimulates student learning. It is important for every university teacher to be aware that, as Studhalter (2017) points out, a successful teacher educator must possess a significant amount of professional knowledge, including pedagogical content knowledge. It is important to focus on teacher competency by developing their own PCK. The quality of instruction students receive and the quality of learning students experience in the classroom are often influenced by PCK (Park & Oliver, 2008). Accordingly, Hill et al. (2004) reported that PCK is an essential element that determines teachers’ success in managing the educational process and leads to effective instruction.

When discussing the importance of technological knowledge, almost all respondents agreed that the importance of technological knowledge is becoming more important by the day for teacher educators, especially in the context of meeting expectations for teaching and learning 21st-century skills. Given recent events related to the pandemic, any digital knowledge in information and communication technology is beneficial for teachers. Online collaboration tools, meeting tools, online learning systems, and synchronous or asynchronous communication are an essential part of the qualifications. In summary, everyone agreed that basic technological knowledge is essential, that students need these skills, for example, from writing emails to learning management systems, and that we cannot afford not to know them, especially among the new generations of students.

In linking pedagogical knowledge, content knowledge, and pedagogical content knowledge with technological knowledge, all of which together constitute technological pedagogical content knowledge (TPCK), one respondent pointed

out: 'I believe that pedagogical knowledge should be placed above technological knowledge, because technological knowledge can be acquired by anyone with enough time and practice. In this sense, I agree with Freire, who said that anyone can teach anything, but that attention to how is most important because pedagogical knowledge benefits students the most. In fact, I believe that the culture that pervades engineering, where students' suffering during learning is sometimes used as a measure of whether they are worth keeping (i.e., the culture of selection), results from teachers' lack of ability to teach well. They place the responsibility for the quality of learning on students and expect them to care only about learning but overlook the fact that good teaching is essential for that to happen.'

TPCK represents the process of building knowledge and reviewing teaching-learning experiences. Several studies (Donnelly et al., 2011; Ertmer, 2005) report that TPCK is an important issue for teachers because the effective and appropriate use of technology increases learner achievement.

Voithofer et al. (2019) report that teacher educators' approach to technology integration in their pedagogical practice is influenced by their attitude toward technology. When basic competencies in the use of technology are in place, teacher educators become more aware of the content-specific pedagogical potential that technology offers for their pedagogical practice (Judge & O'Bannon, 2008; Krumsvik, 2014). Mishra and Koehler (2006) pointed out that technological knowledge must be integrated with the other two forms of knowledge to achieve meaningful technology integration and not just added as an overlay to the other forms of knowledge.

Several studies (Dong et al., 2015; Koh et al., 2013; Pamuk et al., 2015) that analysed the relationship between different TPCK knowledge bases have shown that second-level knowledge bases (such as TPK and TCK) are strong predictors of TPCK. Nevertheless, these studies did not find the expected correlation between PCK and TPCK, suggesting that experienced teacher educators are not necessarily able to transfer their pedagogical knowledge and skills to technological teaching approaches.

Teachers also discussed the knowledge and skills they felt they lacked that would be useful in their teaching jobs and could make them better teacher educators. They pointed out some of them, for example, public speaking, pedagogical knowledge, empathy, a more sustainable way of teaching and approaching teaching and learning, being inclusive, and having international experience;

being open-minded, a more sustainable approach to teaching and learning, communication skills, pedagogical courses or more related approaches, cultural knowledge and facilitation skills, courses in formal teaching pedagogy and frameworks, patience, tolerance, better technological knowledge, improving communication skills, developing creativity in teaching approach, developing an interdisciplinary approach to teaching content, improving IT knowledge and updating new communication tools, among others.

One of the respondents pointed out an important aspect:

'I think I lack time in the classroom; I think you only get better by exposing yourself to different challenges. There will always be things I don't know that I don't know, and the real need to teach new students is to be able to identify those needs.0 He continued, 'I need to be interested in the young learners and take them seriously in their academic aspirations. That way, they can make the transition from the school and student mindset to a more adult way of learning at tertiary education.'

Teachers were the factors that most influenced respondents' educational qualifications. In addition, they also mentioned study experiences, including interactions with weaker and stronger students, parents, formal education, profession, informal experiences (mentoring) during doctoral studies, friends, colleagues from other universities, and concrete experiences in the lecture hall, among others.

One of the respondents said, 'I learned the most from bad teachers, in classes that were boring or frustrating. I try to do the opposite of what those teachers did (which was mainly lecture).'

Perez-Poch and López (2016) conducted a survey on university teachers' opinions about the importance of certain competencies related to the teaching process. The results showed that communicative competencies were the most important, while interpersonal, methodological, planning, and management competencies were also of relatively high importance. Competencies related to the ability to innovate were rated lowest, while competencies related to teamwork were rated second lowest.

5.4 Teacher educators' opinions about STEAM teaching and learning approaches

The fourth section of questions about STEAM teaching and learning was divided into three sub-sections. The first subsection was related to knowledge and promotion of the STEAM field. The majority of the respondents were familiar with the acronym STEAM and understood the concept for the most part, while the others were more familiar with the acronym STEM.

Yoo et al. (2016) suggested that teachers may not perceive STEAM as a teaching and learning method but rather as a popular term. Son et al. (2012) showed that teachers' understanding of the STEAM approach increased once they had the opportunity to make connections to their curricula to understand how to apply it in their lectures.

Only the minority who had heard of STEAM could address the added value of 'A' in STEAM as a more holistic and realistic view of the world, allowing creativity as part of science and allowing free expression, alternative forms of expression, as well as alternative teaching methods. One of the interviewees further stated, 'In my opinion, it is very important to integrate science and art in further research to overcome disciplinary ideas and integrate practices across perceived boundaries.' Some of the respondents include some research projects in their teaching, and in doing so, they need to use multidisciplinary areas such as science, technology, engineering, and mathematics to solve problems more effectively. Overall, teacher educators did not have a complete understanding of how to integrate art into STEAM units.

In line with our findings, Herranen et al. (2021) and Herro & Quigley (2017) also discuss in their study that it is still not 100% clear what exactly the 'A' in STEAM stands for some people. McGuinness (2021) reports that STEAM is still in its infancy in education, and, therefore, there is little research on it. Component A - Arts (creativity) has only attracted active research interest since 2018 (Dorofeeva et al., 2020). In addition, an official, universal agreement on what STEAM learning and teaching approach means does not exist. Specific terms have not yet been defined and may have different meanings depending on the researcher (McGuinness, 2021).The majority of universities where respondents work do not support the idea of STEAM teaching and learning but do support STEM. In addition, the majority of universities also do not have a programme to improve and intensify STEAM teaching and learning or courses to train the STEAM teaching approach. This study also showed that teachers without STEAM training tend to use a more limited concept

of STEAM education than teachers with this experience, which is consistent with the findings of Paik et al. (2018).When discussing the competence of the respondents in the field of STEAM, the majority lack knowledge about this approach and, therefore, do not feel sufficiently competent. Their responses were as follows: 'My competencies are limited, and I believe there are several tools I do not know about that could be very important/useful for the classes I teach0 and 'I try to be. I get feedback from students that helps me evaluate and improve my teaching methods.'

Overall, the teacher educators interviewed lack skills and knowledge that would improve their competence in teaching STEAM. They describe several needs to facilitate STEAM education, including pedagogical courses, improving interdisciplinary skills, learning how to integrate art into science courses, connecting scientific and artistic knowledge in a practical way through examples of good practice, learning approaches that combine aspects of the STEAM areas and can be applied in specific disciplines, tools or techniques commonly used in STEAM, improving knowledge of the subject taught, and also more familiarity with instructional technologies. All respondents feel that they need and would take additional courses or programmes to enhance their professional development in STEAM teaching and learning.

According to Geng et al. (2019), current teacher educators lack the professional competencies to implement the STEAM approach, technologies and equipment, elaborated curriculum, teaching materials, assessment criteria, means to integrate subjects, limited school space, and others.

In line with this, Shin and Han (2011) pointed out that teacher educators primarily lack time to develop STEAM-related curricula, supportive administrators, productive in-service teacher professional development, and consultation with education experts.

Teachers suffer from a lack of time and teaching materials to implement STEAM in schools (Lee et al., 2013; Shin & Han, 2011) and believe that there are not enough professional development programmes for teachers, leading to a lack of confidence in STEAM (Lee, 2014).

Factors hindering successful development of STEAM include lack of equipped classes for experimental activities, lack of time for teaching, lack of in-service professional development courses for teachers and manuals for integrated learning, lack of teaching materials, lack of collaboration among teachers, and the emphasis on teaching content rather than understanding it, the low level of

digital literacy among students, the lack of interdisciplinarity in curricula leading to complications in integrating subjects, and the lack of preparation of students for a new kind of education (Lee et al., 2019).Our study showed that the majority of respondents do not implement the idea of STEAM teaching and learning in their lectures or courses, mainly due to a lack of professional competencies to implement the STEAM approach. Those who do implement the approach use many activities and clicker questions in class to minimise lectures and use project-based activities, interdisciplinary approaches, and similar ones.

Herro and Quigley (2017) reported that after analysing data from several years of professional development for STEAM teachers, they found that the role of teachers trained to provide STEAM changed in the classroom from that of a teacher to that of a facilitator. This is also consistent with Gardner et al. (2019), who reported that teachers who received in-service teacher professional development in STEAM education felt more self-efficacious than those who did not receive in-service teacher professional development.

Regarding the key competencies that students and teachers acquire through the STEAM teaching and learning approach, in the third subsection (personal opinion and experiences related to STEAM) of the last part of the semi-structured interview, respondents indicated an understanding of how different disciplines work, employability skills, teamwork, communication, understanding of ways of working, understanding of the communities with which one works, understanding of the social implications of the discipline, knowledge of the epistemologies of the discipline, challenges of conceptual understanding, and existing evidence-based practices for the particular area, critical, creative, and innovative thinking, problem-solving skills, a holistic view of life through a combination of logical and intuitive thinking, a particular general way of thinking and acting, basic knowledge and skills (competencies) for a particular area of STEAM, communication skills, technological skills, and pedagogical skills.

One of the respondents shared his concerns with us, saying, 'I think STEAM is a bit overrated. A good science education includes math, technology/engineering, and also aspects of the arts'.

Analysis of the results of the study conducted by Tytarenko et al. (2021) suggests that the STEAM approach has a positive impact on the professional development of future teacher educators.

They felt that STEAM addresses multiple disciplines but does not necessarily integrate them. This is consistent with Son et al. (2012), who suggest that teachers understand the core concepts of STEAM but have difficulty articulating them clearly in theory, much less in practice.

The teacher educators interviewed see the STEAM teaching and learning approach as a collaboration of different teachers from different fields of STEAM. STEAM teaching often requires cooperation with teacher educators from other subjects, and communication with teachers from other subjects is difficult due to the different cultures and characteristics of the subjects (Lee, 2014; Noh & Paik, 2014). Although such difficulties make collaboration complex, it is necessary because it is almost impossible for a single teacher to manage an entire STEAM educational programme. Collaboration allows teachers to build bridges between disciplines (Morrison, 2006) and explore scenarios related to real-world problems. Teacher educators feel that the collaboration has helped them understand STEAM content related to interdisciplinary education, connect with experts in the field, and engage in fruitful discussions to address current and future implementation challenges. However, Sim et al. (2015) reported difficulties in collaborating with teachers of other subjects.

6. Conclusions

In this study, we examined the identity of 22 university STEAM teacher educators. The study is based on interviews with teacher educators from different areas of STEAM, working at universities around the world, about their assumptions and perceptions of the role and identity formation as teacher educators.

The teacher identity examined in this study reflects a dynamic nature that evolves and changes. The development of a teacher educator's identity can be compared to a long-distance race. It can be concluded that all teacher educators interviewed recognised the need to develop specific competencies as a very important element in the learning process. Teacher educators need to continue to develop their professional and pedagogical competencies so that they can help students achieve their learning goals in the best possible way. Many teacher educators do not have experience with the STEAM approach and lack programmes and courses related to STEAM education. The majority of respondents are familiar with the STEAM acronym and understand the concept for the most part, but they are not sure what value the 'A' in STEAM adds. Respondents do not feel competent enough and lack skills and knowledge that would improve their competence in dealing with STEAM teaching and learning. Therefore, most of

the respondents do not implement the idea of STEAM teaching and learning in their courses. Based on the conducted research, we can draw conclusions about the desire to train STEAM competence of teacher educators who teach subjects in the field of STEAM and are able to train STEAM competence of their students. In addition, teacher educators would like more support and organised courses from the university regarding the STEAM teaching and learning approach.

Based on the findings of this study, it would be ideal to conduct further quantitative and qualitative research studies to gain a deeper understanding of the identity of STEAM teacher educators. Based on the results of the present study, we conclude that the in-service professional development programme within the frame of TPCK should be offered to teacher educators in order to become even better. The programme should provide participants with 1) TPCK of the specific scientific field (individuals CK), 2) practical experience in all major TPCK (tertiary level didactics, assessment, ICT strategies, etc.), and 3) specific content that emerged from this research should be part of the course (e.g., cognitive science, inclusive education, about student diversity, social and communication skills, etc.).

Limitations of this study include the relatively small participant group, which affects generalisability in other settings. Interviews with a larger number of participants should be conducted as part of this study, and future research could include a broader profile of academic staff (including teaching assistants) in the interviews. In addition, conducting interviews in English with non-native speakers takes much longer because much more clarification and explanation are required, and expressive ability may be limited, so some important information may be lost during the interviews.

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Chapter 5: Mentor teachers' perspective of qualities of student teachers' skills and attitudes for the profession of early childhood educator: Kosovo and Slovenia context

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Abstract

This chapter is an account of the evaluation of pedagogical practice for future kindergarten teachers in two countries: Kosovo and Slovenia. In the theoretical part, we first present how pedagogical practice is organised in the Early Childhood Education (ECE) programme at the Faculty of Education at the University of Prishtina and in the Early Childhood Education programme at the Faculty of Education at the University of Ljubljana. Data were collected in two countries: 97 mentor teachers in ECE institutions from Kosovo and 77 mentor teachers in ECE institutions from Slovenia. The results show mentor teachers' views and evaluations of students' attitudes and work during pedagogical practice. First, we were interested in the mentor teachers' view of the student-teachers' work interests during pedagogical practice. Second, we were interested in the student teachers' relationship with the mentor, with other professionals, and with the children. Third, we were interested in the student-teacher performing activities. The research shows that mentor teachers were mainly satisfied with student-teachers' work interest and performance, although there is room for improvement with regard to managing activities and the abilities for self-reflection. Mentor teachers highly valued the impact of student-teachers' pedagogical practice and recommended longer periods of practice during initial teacher education. We can conclude that cooperation with mentor teachers is always welcomed in order to ensure quality in teacher education, and their feedback is very important to improve the theory and practice in teacher education programmes.

Keywords: Mentor teachers, student teachers' skills and attitudes, early childhood educator, Kosovo, Slovenia

1. Introduction

A teacher's professional identity develops and forms in the period of initial teacher education, especially during pedagogical practice. The process of learning takes place in the interaction with teacher mentors (Johnson, 2003). The development of student teachers' instructional strategies and the provision of the essential skill set for their transition to autonomous teaching are both facilitated by mentor teachers (Feiman-Nemser, 2003; Normana & Feiman-Nemser, 2005). During the mentoring process, student teachers gain knowledge of effective instructional methods, effective communication strategies that will help them communicate with various stakeholders in the future, and other organisational skills crucial to their future role in the educational system (Sowell, 2017; Hudson et al., 2013; Richter et al., 2013; Feiman-Nemser, 2003). According to Johnson (2003) and Ticknor (2014), mentor teachers can help student teachers shape their confidence, power, and agency. The teacher's professional identity is important because it determines a teacher's work satisfaction, commitment, and motivation (Day et al., 2006); however, it also affects teacher retention with regards to work and even burnout (Hellman, 2007). The purpose of pedagogical practice is to provide student teachers with an opportunity to apply their pedagogical knowledge and skills in practice and to use them in real-life classroom experiences under the supervision of professional educators and university professors (Perolli-Shehu et al., 2022). Izadinia (2015) points out how important clear expectations in the relationship between future teachers and mentor teachers are. When the mentoring relationships are positive and expectations are met, student teachers feel more confident as teachers (Izadinia, 2015, p. 1). Hence, this study aims to explore mentors' views on student teachers' work interests and attitudes towards the profession of early childhood teacher. Moreover, this study compares data gathered from mentor teachers supervising students in early childhood education settings during pedagogical practice in the Republic of Kosovo and the Republic of Slovenia.

2. Pedagogical practice and mentoring student teachers in Kosovo

Teacher education in Kosovo has undergone countless reforms in the last two decades (Saqipi, 2019). In achieving the needed educational reforms, Kosovo responded to the European trends on quality education (Saqipi & Vogrinc, 2017). Within the efforts to transform initial teacher education in line with the recently introduced standards (MESTI, 2017) for teacher practice and teacher education, the Faculty of Education of the University of Prishtina developed courses for student teaching and outlined the expectations for students during their school experience (Gjelaj et al., 2020).

According to Aglazor (2011), field-based experiences, such as student pedagogical practice in teacher education, are intended to bridge theory and practice; as such, the pedagogical practice exercise is the culminating point that determines the quality of the education received and the professional identity of the aspiring educator (Aglazor, 2011 in Perolli-Shehu et al., 2022). Pedagogical practice is an integral part of all programmes of the Faculty of Education, which is guided and organised by the coordinator for pedagogical practice, whose role is mainly organisational and has the main purpose of facilitating the process and assuring connection with the preschool institutions and schools.

The Early Childhood Education programme (ECE programme) is a four-year programme with 240 ECTS whose main goal is to prepare future educators who will be competent in their professional work with children in early education. In addition to the theoretical aspect, the programme also strengthens and foresees the development of skills as a vital component for the educational programmes of future educators in accordance with the demands of the labour market. This is mainly done throughout pedagogical practice courses, which are planned within the whole study programme. In pedagogical practice, students are part of classroom settings, observe classroom dynamics and educator interaction with children, have direct contact with children, and plan and organise classroom tasks, among other activities (Perolli-Shehu et al., 2022).

The ECE study programme plans five pedagogical practice courses, which are organised during the studies. Pedagogical practice in the first year of the programme is part of the two courses: Early Childhood Education with Practice (Birth–3 years) and Early Childhood Education with Practice (3–6 years) with two weeks of practice in the ECE settings, one week for each age group.

In addition to the theoretical content of the courses, the main purpose of the practical part of these courses in the first year is mainly to develop the professional skills of observation and reflection. Students will be able to observe and reflect on child development and learning (FE-UP, 2004). Mentor teachers will be modelling good examples in interactions with children, planning, applying effective learning strategies, and cooperating with parents and colleagues. Within the cooperation and interaction with the mentor teachers, students will be able to reflect and critically analyse their observations (FE-UP, 2004).

The second pedagogical practice, which is organised during the second year of studies, aims to further develop reflective skills and gradually take some responsibilities for working with children in the age group of 0-3 years. In addition to the lectures at the faculty, they will also go to ECE settings for a period of five weeks (FE, 2021). Based on the pedagogical practice Guidebook (2004), students during the second year of pedagogical practice will help the mentor teacher and other staff in organising activities. They will be able to plan and implement developmentally appropriate activities for small groups, take responsibility for daily routines, observe and reflect using checklists or other instruments, and interact with children actively.

During the third year of studies within the course of the third pedagogical practice, students spend six weeks in ECE settings, working with different age groups from three to six years old, including pre-primary classes in the schools. The intended learning outcomes of this course are planned to be achieved through work with children in the age groups from three to six years old. During this pedagogical practice based on the pedagogical practice Guidebook (2004), it is expected that students will be able to:

1. Plan, implement and evaluate a unit of activities that take place over a period of approximately two weeks;
2. Encourage and guide children in different learning activities and games that are appropriate for them;
3. Be able to keep observation notes and document the child's development and learning;
4. Learn about how learning occurs in children;
5. Be familiar with the stages and characteristics of children's development and learning;
6. Reflect and discuss what they are doing with the mentor teacher and faculty supervisor and with other colleagues.

Teacher education policy in Kosovo does not require practice teaching for the induction phase (MEST, 2017). Novice teachers enter their profession directly after they graduate. Therefore, the fourth pedagogical practice serves as an opportunity to develop the skills for independent work. Hence, during their last year of studies, student teachers will spend eight consecutive weeks working with the group ages. This time, they can choose age groups based on their interests and needs. Under mentorship and supervision, student teachers will independently undertake all the preparatory activities and work directly with children (Faculty of Education, 2021). This course intends to develop main teacher competencies, including interaction with children, observation and planning, applying different learning strategies, organising space, communication with parents and cooperation with other teachers. An important feature of the reformed programmes at the Faculty of Education was students' reflection competence development as one of the key skills among a set of skills and outcomes foreseen under the teacher education curriculum revisions (Kaçaniku et al., 2019). In this manner, during all 21 weeks of the pedagogical practice, students will use their reflective journals not only for the purpose of documentation but also as a learning tool.

The purpose of the journal is to record the student's reflections and thinking about what they have experienced and learned, as well as their goals for future professional development. The reflective journal also includes discussions on learning from experience and self-assessment. For the first five days of practice, detailed instructions are given, which guide the student in the process of observation and reflection. For the pedagogical practice of other years, students are free to decide what is the focus of their reflection during the days of the pedagogical practice. This can also be discussed with the mentor teacher and the supervisor from the faculty. In addition to the reflective journal, students' portfolios are used for documentation, reflection, and motivation.

According to the internal regulations for pedagogical practice, responsibility for supervising student teachers is shared by faculty supervisors and mentor teachers in early childhood education settings. The triangle of main actors is supposed to be interactive during the whole period of pedagogical practice (see Figure 1). The primary purpose of supervision is to provide students with the guidance and direction they need to make continuous progress in developing as skilled and competent educators.

There is clear guidance regarding the roles of all three parties. Teacher educators are assigned as supervisors who will provide frequent oral and written feedback for the students. Constructive feedback related to students' work must be written by the mentor teachers who are assigned by the ECE institution. The Faculty of Education developed a professional development programme for 300 school teachers from all levels who were selected in cooperation with municipal authorities and schools to serve as mentors of new students in the reformed programmes.

These mentor teachers were offered a three-day teaching session intended to help them develop an understanding of the roles and expectations for student pedagogical practice, which shows the importance that the university was placing on the mentoring role. Comments should include both praise and suggestions for where improvements are needed (Gjelaj et al., 2020). After the pedagogical practice is finished, students and mentors are encouraged to give their feedback. The faculty uses online questionnaires both for students and mentor teachers.

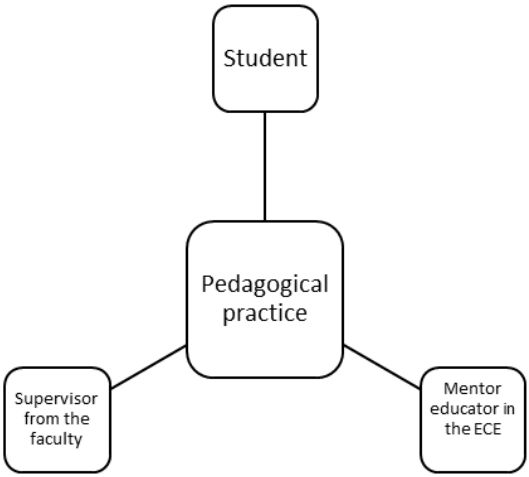

Figure 1. The triangle of the main actors in the pedagogical practice cooperation

3. Pedagogical practice and mentoring student teachers in Slovenia

The preschool education study programme is a three-year programme with 180 ECTS. The main goal of the study programme is to train students for quality educational work with younger children (i.e., preschoolers and children in the first grade of a nine-year-old primary school) and for cooperation with parents, colleagues, and other experts. Through the education process, students achieve the general competencies and subject-specific competencies of the study programme, as well as the subject-specific competencies of the ECE study programme. Graduates of the programme must know how to communicate with children and adults and be able to plan, implement and critically analyse educational work. Elective subjects of the programme encourage students to study more deeply in those areas of work in kindergartens for which they have a special interest and ability. An important goal of the study is the acquisition of basic and broadly transferable knowledge that will enable the graduate to be in the process of lifelong learning (Predstavitveni zbornik študijskega programa Predšolska vzgoja, 2023).

Pedagogical practice is an important component of the programme. It is the element that provides the most direct integration of academic and professional studies, discipline and profession, and theory and practice (Lipec-Stopar, 2007). In the White Paper on Education in the Republic of Slovenia (2011), pedagogical practice is emphasised as an important factor in the initial teacher education. The pedagogical practice can be observational, in which teacher students observe a mentor teacher in the implementation of educational activities; cooperative, in which teacher students take part in educational activities; or independent, in which teacher students independently implement the curriculum under the guidance of a mentor teacher. The process of pedagogical practice offers student teachers numerous opportunities for active testing in concrete learning situations, as well as integrating theoretical and practical teaching and expertise. Pedagogical practice allows them to make the acquisition and creation of new knowledge through the transformation of experience (Juriševič et al., 2005). Pedagogical practice is an essential part of the research-oriented study of preschool education, in which students connect theoretical principles to practice and develop pedagogical ways of thinking, which are not only based on feelings but are supported by arguments arising from research work (Cvetek, 2002). Modern early childhood educators must know the pedagogical content, but they must also develop their own pedagogical approach. This process of professionalisation in preschool institutions takes place with the support of mentor teachers who

guide student teachers in the process of teaching and learning and are willing to share their experiences and materials with students, provide feedback and encourage reflection, provide opportunities for independent study and work with children, trust students, support and enable them to learn about the work and tasks of preschool teachers and their responsibilities. They are examples of work in the process of education and learning of children.

Student teachers within the ECE study programme have pedagogical practice in all three years of undergraduate study. In the first year of study, students have two weeks of pedagogical practice in the first age group in kindergarten (11 m–3 y); in the second year, they have one week of pedagogical practice in 1st class of elementary school and In the final, third year of study, student teachers have four weeks of pedagogical practice in second age group in kindergarten (3–6 years) (Devjak, Vilič, 2014a; Devjak, Vilič, 2014b; Devjak, Vilič, 2014c).

The pedagogical practice in the first year of study is observational, and the content of the pedagogical practice is part of the implementation of the curriculum carried out by the mentor teacher. The student-teacher gets acquainted with the planning, implementation, and evaluation of educational work. In addition to the direct work with the children, the mentor is obliged to familiarise the student teacher with all the activities in the kindergarten: the organisational structure, infrastructure, local, cultural, social, and other peculiarities. Student teachers actively monitor mentor teachers' work (cooperate, assist, not only observe), contribute and test their ideas (Devjak, Vilič, 2014a).

The intended learning outcomes for the student teacher are:

1. Learns about the various pedagogical (educational) approaches (e.g., ways to motivate, encourage, integrate, and solve educational problems, organisation of the work, the integration of various contents, etc.);

2. Learns about the personality and other specific features of the child (in particular, working with children with special needs);

3. Knows the methods of monitoring child development and learns about the ways of cooperating with parents;

4. Learn about the teamwork of the preschool teachers and their assistants in planning implementation and evaluation of the curriculum;

5. Learns about other forms of work and activities related to preschool teachers' profession (ibid).

The pedagogical practice in the second year of study is also observational and takes place in the first year of primary school, as preschool teachers can be employed as second teachers in the 1st grade (Devjak, Vilič, 2014b).

The intended learning outcomes are:

1. Learning about different pedagogical approaches;
2. Learning about the personality and other specific features of the children in school (in particular, working with children with special needs);
3. Knowing the methods of monitoring child development;
4. Learning about the ways of cooperation between school and parents;
5. Learning other forms of work and activities that take place in Year 1 of primary school and which are related to preschool teachers' professional role (ibid).

Student teachers should also be able to use the lessons from the pedagogical practices directly in further studies, critically analyse and evaluate already acquired knowledge in pedagogical practice and assess the adequacy and compliance of the content of the study programme with the needs of the pedagogical practice (ibid).

The pedagogical practice in the third year of study is independent. The objectives and competencies are:

1. Independent (under supervision) implementation of the curriculum,
2. Efficient and flexible organisation of space and time and the transitions between the activities.
3. Cooperation with the assistant teachers and other professional workers.
4. Monitoring and evaluation of the achievements, progress and development of the children.
5. Communication with parents and the use of various forms of cooperation with them (Devjak, Vilič, 2014c).

The intended learning outcomes are knowledge and understanding:

1. Independently preparing, carrying out, and evaluating a minimum of three weeks implementation of the Curriculum for Preschool Institutions;

2. Monitoring the child's development; learning about the ways of cooperation with parents;

3. Learning and participating in various forms of teamwork of preschool teachers and their assistants in all stages of planning, implementation and evaluation of the curriculum (Course Syllabus - Classroom Practice from 3 to 6 Years n.d).

At the end of every pedagogical practice, the student has to write a report and a reflection on pedagogical practice and deliver it to the head of pedagogical practice. The report contains five activities: first, the student teacher must present the preparation phase of the pedagogical programme; second, the student teacher must record and describe in detail an entire day in the preschool institution. The third activity contains an observation of the adaptation of educational work with a child with special needs, while the fourth activity is a record of participation in at least one extracurricular activity; the last activity is a reflection of the practice (Devjak, Vilič, 2014a; Devjak, Vilič, 2014b; Devjak, Vilič, 2014c).

The fourth activity differs for third-year students; as their practice is independent, they must also submit a detailed presentation of performed activities in the scope of four weeks of pedagogical practice. At the end of the third year of pedagogical practice, student teachers must also submit a portfolio (Devjak, Vilič, 2014c).

During all types of pedagogical practice, students have a variety of opportunities to gain important teaching experience. On this basis, they deepen their professional knowledge and develop pedagogical competence. The more that they are aware of these specific learning situations during pedagogical practice, the more they can, independently and/or with the help of a teacher mentor, use them for learning purposes. Learning during pedagogical practice differs somewhat from classical learning, and so does the assessment. The idea of a portfolio of pedagogical practice intends to improve the quality of student teachers' learning during pedagogical practice. Undergraduate students gradually develop a product, with the help of which they present their pedagogical competence, achieved during pedagogical practice in a very genuine (authentic) form, for example, with preparations, reflections, projects, seminar essays, and also with content that indicates their learning or academic performance, as seen by others (mentors, students, principals, university teachers). All this contributes to a more valid assessment of the knowledge acquired or achieved during pedagogical practice (Juriševič, 2007). On the basis of the student report, written reflections and a portfolio of pedagogical practice, student teachers

are assessed with a descriptive grade (pass/failed). Student teachers are also assessed by mentor teachers through a portal for pedagogical practice, where they give feedback about students' show of interest and willingness to work, their relationship towards children, mentor teacher, other staff and parents and performed activities. Each year, after pedagogical practice, we do an evaluation discussion with student teachers and focus interviews with mentor teachers.

When students finish their studies in preschool education, they must also pass a professional exam in order to perform educational work in a public kindergarten, which they can apply for after completing 840 hours of educational work in a kindergarten. Pedagogical practice is also counted as already acquired work experience but in the share of no more than one third of the scope of pedagogical practice. They can take the exam after completing five practical sessions. The professional exam consists of knowledge of the constitutional regulations of the Republic of Slovenia, the regulations of the institutions of the European Union and its legal system, and regulations governing human and children's rights, from the regulations governing the field of care and education and the Slovenian literary language (Strokovni izpit za strokovne delavce v vzgoji in izobraževanju, 2023).

4. Methodology

This research examines mentor teachers' views on student teachers' work interests and attitudes toward the profession of early childhood educator. We were especially interested in mentor teachers' opinions about (R1) student teachers' interest and willingness to work, (R2) student teachers' relationship towards children, mentor teachers, other staff and parents, and (R3) student teachers performed activities.

Non-experimental descriptive research design was conducted using the same online questionnaires for both countries, which consisted of three substantive parts as mentioned above. Data were collected using an online questionnaire, which contained scale questions. Mentors answered the questions on two scales (excellent, adequate, deficient, inadequate; appropriate, partially adequate, inadequate). Data were analysed using SPSS and Excel.

In addition, a qualitative evaluation (group interviews) was conducted with the participation of mentor teachers. The goal was to determine what positive aspects they perceive in the implementation of the pedagogical practice and what improvements they suggest.

This qualitative part was analysed in six steps: 1) editing the material, 2) determination of coding units, 3) coding, 4) selection and definition of relevant terms and formation of categories, 5) definition of categories, and 6) formation of the final theoretical formulation.

The research included 97 mentor teachers working in early childhood education (ECE) settings in Kosovo and 77 mentor teachers working in ECE settings in Slovenia.The 77 mentor teachers from Slovenia are graduated preschool teachers from one of the three faculties of education in Slovenia: 73 mentor teachers are employed in public kindergartens, four in private kindergartens; 76 of them are female, and 1 is male. In Kosovo, 97 mentor teachers are included; 44 of them work with the students of the University of Prishtina/Faculty of Education, while the others mentor student-teachers from other public universities in Kosovo; 72 of them work in public institutions, 14 in private kindergartens and 11 in community-based centres.

5. Findings and Discussion

5.1 Interest and willingness to work

First, we were interested in the opinions of mentor teachers about student teachers' interest and willingness to work during pedagogical practice (R1). The question for evaluation was what interest in pedagogical work student teachers showed during the pedagogical practice.

Table 1. Work interest during pedagogical practice

	KOSOVO		SLOVENIA	
	f	f%	f	f%
appropriate	52	53.6	75	97.4
partially adequate	42	43.3	2	2.6
inadequate	3	3.1	0	0.0
Total	97	100.0	77	100.0

The majority of mentor teachers in Slovenia (97.4%) and slightly over half of mentor teachers in Kosovo (53.6%) reported that student teachers' interest in teaching during pedagogical practice was appropriate; the other half believed that it was adequate (43.3%). From the qualitative study, we determined that Slovenian student teachers were characterised as innovative and independent by their mentors, while Kosovo mentor teachers reported that student teachers showed interest in educational activities depending on the year of the study, mentioning that they showed more interest during the last years of their studies. It is expected that towards the end of their studies, student teachers will be more interested in pedagogical practice, as they have more knowledge, more acquired subject-specific competences and are aware that they are about to start independent work in an ECE institution.

For the second question, we were interested in the opinion of mentor teachers about how prepared the student teachers were for pedagogical practice.

The majority of mentor teachers in Slovenia (98.7%) and a little less than half of mentor teachers in Kosovo (43.3%) answered that they were appropriately prepared for the pedagogical practice; a small majority of mentor teachers in Kosovo (54.6%) answered that the students were only partially adequately prepared for the pedagogical practice.

High percentages are most likely the result of the fact that student teachers receive detailed instructions before pedagogical practice, and the information regarding pedagogical practice obligations is also provided for mentor teachers. In Slovenia, we had two meetings regarding pedagogical practice with each group of student teachers preparing them for practice, going through instructions for pedagogical practice and their obligations. Mentor teachers receive written explanations of their and students' obligations and instructions for the use of the portal for pedagogical practice.

Table 2. Preparation for pedagogical practice

	KOSOVO		SLOVENIA	
	f	f%	f	f%
appropriate	42	43.3	76	98.7
partially adequate	53	54.6	1	1.3
inadequate	2	2.1	0	0.0
Total	97	100.0	77	100.0

In the qualitative study, mentor teachers from Slovenian ECE institutions evaluated student teachers as well-prepared and possessing self-initiative. However, mentor teachers also indicated that they would appreciate student teachers writing a motivational letter prior to the start of pedagogical practice, outlining their expectations. Mentor teachers also indicated that they would like to receive a more precise definition of their mentor duties, that they would like to have a better understanding of the goals and purpose of the pedagogical practice, and that they would also like to have a better understanding of the competencies student teachers have already acquired (presentation of curricula for each subject). Mentor teachers from Kosovo ECE institutions suggested that the students should be more engaged in the direct work with children, work on managing their emotions/stress, be more active and show interest in learning and developing their skills. They also suggested that the pedagogical practice should take longer.

We were also interested in how mentor teachers would assess a student teacher's attitude towards work and tasks. In the opinion of the majority of mentor teachers in Slovenia (97.4%), student teachers show mainly appropriate attitudes towards work. However, only half of the mentor teachers in Kosovo believe the same (52.6%); a little less than half of them (40.2%) believe that the student teachers' attitudes towards work were only partially adequate.

It is clear from the mentor teacher's answers that student teachers showed an appropriate interest in the work during the pedagogical practice, they came to the practice appropriately prepared, and their attitudes towards the work were also appropriate.

Table 3. Assessment of student teacher's attitude towards work and tasks during pedagogical practice

	KOSOVO		SLOVENIA	
	f	f%	f	f%
appropriate	51	52.6	75	97.4
partially adequate	39	40.2	2	2.6
inadequate	7	7.2	0	0.0
Total	97	100.0	77	100.0

5.2 Student teachers' relationships

Secondly, we were interested in the mentor teacher's opinion about student teachers' relationship towards the mentor teacher, other professionals and children (R2). We were interested in their relationships with mentor teachers, as teachers' identities are gradually constructed in their interactions with significant others, such as mentor teachers and other professionals in ECE institutions (Izadinia, 2015).

Table 4. Relationship with the mentor teacher

	KOSOVO		SLOVENIA	
	f	f%	f	f%
appropriate	79	81.4	73	94.8
partially adequate	17	17.5	4	5.2
inadequate	1	1.0	0	0.0
Total	97	100.0	77	100.0

The majority of mentor teachers in ECE institutions in Slovenia (94.8%) and Kosovo (81.4%) reported that student teachers established mainly appropriate relationships with them during pedagogical practice. A good relationship between the mentor teacher and the student teacher can transform the teachers involved and can inform the development of teacher identity in initial teacher education by instilling in student teachers a sense of confidence, power and agency (Izidinia, 2015).

It is also important that student teachers establish a positive relationship with other professionals in ECE institutions.

Table 5. Relationship with other teachers and professionals in ECE institutions

	KOSOVO		SLOVENIA	
	f	f%	f	f%
appropriate	56	57.7	72	93.5
partially adequate	38	39.2	5	6.5
inadequate	3	3.1	0	0.0
Total	97	100.0	77	100.0

The majority of mentor teachers in ECE institutions in Slovenia (93.5%) reported that student teachers established appropriate relationships with other teachers and professionals during pedagogical practice. Somewhat over half of mentor teachers in Kosovo (57.7%) believed the same, but 39.2% of them believed that the student-teacher relationship was only partially adequate. Other professionals in ECE institutions represent significant others for student teachers, so it is important that they know how to establish an appropriate relationship with them, as this improves their teacher identity and also gives them insights into the day-to-day work in ECE institutions (Izadinia, 2015).

Table 6. Relationship with the children

	KOSOVO		SLOVENIA	
	f	f%	f	f%
appropriate	67	69.1	75	97.4
partially adequate	29	29.9	1	1.3
inadequate	1	1.0	1	1.3
Total	97	100.0	77	100.0

Mentor teachers in ECE institutions in both countries answered that student teachers established mainly appropriate relationships with children during pedagogical practice (Kosovo: 69.1%; Slovenia 97.4%). Nearly a third of mentor teachers in Kosovo (29.9%) responded that the relationship with the children was only partially adequate. The relationships between the educators in ECE institutions and children are the most important as they may play a role in children's early experiences of internalising problems. 'Teacher-child relationship quality is conceptualised as the positive (e.g. closeness) and negative (e.g. dependency, conflict) affective nature of a child's relationship with his or her teacher as well as the frequency of positive (e.g. engagement, communication) and negative (e.g. conflict) interactions between the child and the teacher.' (Zatto & Hoglund, 2019, p. 29).

The results show that mentor teachers are satisfied with the relationship student teachers establish with them, other professionals, and children, although some of the mentor teachers mentioned that student teachers (regarding their relationship with children) were holding back at first; however, that changed during practice, as they felt more comfortable in the group of children their relationship also became more open.

5.3 Elements of performed activities

The last part of the evaluation focused on the mentor teacher's opinion about elements of performed activities during pedagogical practice (R3). The questions in the first part related to the structure, the content, the use of forms, methods, approaches, and tools of activity organised by the student teacher and the managing of the planned activity.

Table 7. The structure of the activity organised by the student

	KOSOVO		SLOVENIA	
	f	f%	f	f%
excellent	27	27.8	64	83.1
adequate	56	57.7	12	15.6
deficient	13	13.4	1	1.3
inadequate	1	1.0	0	0
Total	97	100.0	77	100.0

Mentor teachers in ECE institutions in Slovenia answered that student teachers mainly performed excellently (83.1%), while less than a third of mentor teachers in Kosovo (27.8%) believed the same. Significantly more than half of mentor teachers in Kosovo believe that the structure of the activity was adequate (57.7%) or, in some cases, even deficient (Kosovo 13.4%, Slovenia 1.3%). Slovenian student teachers have a significant amount of pedagogical practice integrated into specific subjects within all three years of study, so they have a good sense of how the structure of the activity should be.

Table 8. The content of the activity organised by the student

	KOSOVO		SLOVENIA	
	f	f%	f	f%
excellent	23	23.7	65	84.4
adequate	63	64.9	11	14.3
deficient	10	10.3	1	1.3
inadequate	1	1.0	0	0
Total	97	100.0	77	100.0

Mentor teachers in ECE institutions in Slovenia answered that students mainly performed excellently (84.4%), while mentor teachers in Kosovo were more critical and answered that the content was mainly adequate (64.9%) but in almost a quarter of the cases also excellent (23.7%). In some cases, mentor teachers also believed that the content of the activity was deficient (Kosovo 10.3%; Slovenia 1.3%). In Slovenia, two of the main subject-specific competencies are knowledge of the content and methodology of the field and an understanding and use of curricular theories and general and didactic knowledge in the subject area (Predstavitveni zbornik študijskega programa Predšolska vzgoja, 2023).

Table 9. The use of forms, methods, approaches and tools

	KOSOVO		SLOVENIA	
	f	f%	f	f%
excellent	24	24.7	61	79.2
adequate	49	50.5	15	19.5
deficient	21	21.6	1	1.3
inadequate	3	3.1	0	0
Total	97	100.0	77	100.0

The majority of mentor teachers in Slovenia (79.2%) and a quarter of mentor teachers in Kosovo (24.7%) evaluated student's use of forms, methods, approaches, and tools during pedagogical practice as excellent, half of mentor teachers in Kosovo (50.5%) and a fifth of mentor teachers in Slovenia (19.5%) evaluated it as adequate. In some cases, the use of forms, methods, approaches, and tools was also evaluated as deficient (Kosovo 21.6%; Slovenia 1.3%) or inadequate (Kosovo 3.1%). Student teachers get a great deal of theoretical knowledge in the field of using forms, methods, and tools during their studies at the faculty, but it is important to get as much practice as possible, because individual performances and implementation of activities carried out within special subjects are only a fragment of real events, and only long term pedagogical practice places future teachers in the role of educators who plan, lead, and direct the work in the ECE institution.

Table 10. Managing the planned activity

	KOSOVO		SLOVENIA	
	f	f%	f	f%
excellent	20	20.6	57	74.0
adequate	58	59.8	20	26.0
deficient	15	15.5	0	0.0
inadequate	4	4.1	0	0.0
Total	97	100.0	77	100.0

Three quarters of mentor teachers in Slovenia (74.0%) and a fifth of mentor teachers in Kosovo (20.6%) evaluated student teacher's management of the planned activity during pedagogical practice as excellent. However, more than one half of mentor teachers in Kosovo (59.8%) and over a quarter of the mentor teachers in Slovenia (26.5%) believed that the management was only adequate or, in some cases, in Kosovo, also deficient (15.5%).

In the second part of the evaluation, we focused on communication with the children, mastery of the professional area, realisation of the goals for planned activities, the correctness of linguistic expression and the ability for self-reflection.

Mentor teachers evaluated student's communication with children during pedagogical practice as excellent (Kosovo 45.4%, Slovenia 87.0%), adequate (Kosovo 44.3%, Slovenia 11.7%) or in some cases deficient (Kosovo 8.2%, Slovenia 1.3%). From the qualitative study, we determined that Slovenian students were characterised as good in communication with children, which is an important feedback for the ECE programme at the University of Ljubljana's Faculty of Education in Slovenia, as appropriate communication with children (and also adults) is one of the main goals of the programme. It is important that the adults in the ECE institutions act encouragingly and reassuringly with their behaviour, are polite and respectful in their communication and behaviour, and thus set an example for the children. Important elements of interaction are frequent positive interactions, responding to the child's questions, encouraging questions, listening attentively, using positive instructions, directing, and encouraging appropriate independence (Kurikulum za vrtce, 1999).

Table 11. Communication with children

	KOSOVO		SLOVENIA	
	f	f%	f	f%
excellent	44	45.4	67	87.0
adequate	43	44.3	9	11.7
deficient	8	8.2	1	1.3
inadequate	2	2.1	0	0.0
Total	97	100.0	77	100.0

Table 12. Mastery of the professional area

	KOSOVO		SLOVENIA	
	f	f%	f	f%
excellent	19	19.6	59	87.0
adequate	55	56.7	17	11.7
deficient	22	22.7	1	1.3
inadequate	1	1.0	0	0.0
Total	97	100.0	77	100.0

Mentor teachers in ECE institutions in Slovenia (87.0%) answered that student teachers mainly performed excellently; approximately half of the mentor teachers in Kosovo believed they performed adequately (56.7%) or, in some cases, even deficiently (Kosovo 22.7 %; Slovenia: 1.3%) on the area of mastering of the professional area during their pedagogical practice. Because the students from the first and second year of the studies in Kosovo mostly observe while in the ECE institutions, it might affect mentor teachers' assessment regarding this issue.

Table 13: Realisation of the goals of the planned activities

	KOSOVO		SLOVENIA	
	f	f%	f	f%
excellent	22	22.7	66	85.7
adequate	56	57.7	11	14.3
deficient	17	17.5	0	0.0
inadequate	2	2.1	0	0.0
Total	97	100.0	77	100.0

Also, the majority of mentor teachers in ECE institutions in Slovenia (85.7%) answered that the realisation of the goals set by student teachers was excellent; however, less than a fifth of the mentor teachers in Kosovo believed the same (22.7%). The majority of mentor teachers in Kosovo believed that the realisation of the goals was adequate (57.7%), while only 14.3% of mentor teachers in Slovenia believed the same. There were also some cases in which the realisation of the goals was, in the opinion of mentor teachers in Kosovo, deficient (17.5%). This result might be impacted by the problems with having an updated ECE curriculum in Kosovo. The approach of planning in the faculty is more integrated, while in ECE institutions, teachers still plan based on very specific subject learning outcomes.

Table 14. Correctness of linguistic expression

	KOSOVO		SLOVENIA	
	f	f%	f	f%
excellent	41	42.3	58	75.3
adequate	44	45.4	18	23.4
deficient	10	10.3	1	1.3
inadequate	2	2.1	0	0.0
Total	97	100.0	77	100.0

Mentor teachers in ECE institutions in Slovenia were more satisfied with student teachers' linguistic expression, as the majority of them (75.3%) believed that it was excellent, while mentor teachers in Kosovo evaluated it as adequate (45.4%) and excellent (42.3%), in some cases, even deficient (Kosovo 10.3%; Slovenia 1.3%) or inadequate (Kosovo 2.1%). From the qualitative study, we determined that Slovenian students were adequate in communication with their practice managers and departments. The kindergarten teacher must introduce children to literary (spoken and colloquial) language and enable them to learn about the literary genre of the language. At the Faculty of Education in Ljubljana, Slovenia, students have the subject Slovenian language (6 ECTS) in the first year of studies and Language and literacy (9 ECTS) in the second year of studies (Predstavitveni zbornik študijskega programa Predšolska vzgoja, 2023). In Kosovo, students have two subjects for the Albanian language and some elective courses on speaking and writing the Albanian language. Additionally, students come from different regions in Kosovo, bringing different dialects and languages.

Mentor teachers in ECE institutions in Slovenia reported that student teachers' ability of self-reflection was excellent (81.8%), while the majority of mentor teachers in Kosovo answered it was adequate (56.7%), although almost a quarter of them also believed it was excellent (24.7%). One of the main goals of the ECE programme at the Faculty of Education in Slovenia is the ability to plan, implement, and analyse educational work. Four out of five Universities in Kosovo that prepare teachers have been recently opened, and preparing student teachers for self-reflection skills might be challenging. This might also be a problem that comes from the poor communication between students and mentor teachers, as well as their supervisors. This information helps the universities to reconsider the process of mentoring student teachers and to improve the quality of teacher education programmes. Mentor teachers from Kosovo declared that they are untrained in mentoring skills and that they will be ready to engage in mentoring when it is possible.

Table 15. Ability of self-reflection

	KOSOVO		SLOVENIA	
	f	f%	f	f%
excellent	24	24.7	63	81.8
adequate	55	56.7	13	16.9
deficient	15	15.5	1	1.3
inadequate	3	3.1	0	0
Total	97	100.0	77	100.0

6. Conclusions

We all agree that pedagogical practice is one of the most important parts of in-service teacher professional development for future teachers. Learning to teach from practice lessons is at the core of student-teacher preparation programmes (Abernathy et al., 2001; Furlong & Maynard, 1995; Tillema, 2009). Our study determined why and in which areas our system of pedagogical practice is good. It revealed that there are differences between the two states regarding the mentor teacher's opinion about student teachers' work interest, preparation for work, and attitude towards pedagogical work. On a scale from 1=inadequate to 4=excellent, mentor teachers in Kosovo mostly rated student teachers' work interest, preparation for pedagogical practice, and attitudes towards work as adequate, while mentor teachers in Slovenia rated them mostly as excellent. At the same time, both countries gained insight into the areas where there is still room for improvement. In Kosovo, mentor teachers reported that the weakest points of the student teachers of early childhood education were:

- Managing activities
- Using forms, methods, approaches, and tools, and
- Abilities for self-reflection.

In Slovenia, based on the mentor teachers' responses, student teachers' weakest points were:

- Linguistic expression,
- Abilities for self-reflection.

Based on these findings, future teachers' programmes for professional development, both in-service and pre-service, should be focused on the skills found to be inadequate or less developed. It is suggested that further study on analysing and revising the content of the syllabuses in the academic programmes preparing ECE teachers should be continuously done. The skills reported as not very sufficient should be more visible and tackled as important issues to develop competent future ECE teachers in the subjects dealing with classroom management, teaching methodology, self-reflection in Kosovo, as well as linguistics and abilities for self-reflection in Slovenia.

The most important thing is that we understand how to listen to all those involved in pedagogical practice, consider suggestions for improvement as constructive and put them into practice thoughtfully. From the qualitative data,

we determined that mentor teachers value the idea of obtaining their insight from the faculty. They feel valued and useful. Mentor teachers in Kosovo asked for more involvement of the supervisor from the faculty, suggesting that the professors (in addition to their lectures) should be closer to the reality of school/kindergarten. Mentor teachers in Slovenia asked to be familiarised with the already achieved competencies of ECE students to better understand what kind of knowledge the students come to pedagogical practice with. Every year, we prepare a short programme for mentor teachers, in which we apply the suggestions that the mentors make. There is never too much practical pedagogical training, but there must be enough of it during studies to enable programmes for starting work and for easier understanding of theoretical content.

We can conclude that supporting student teachers in learning to teach is a collaborative effort by mentor teachers, teacher education supervisors, and student teachers. This leads us to the idea of having closer relationships between the faculties and the educational institutions beyond formal meetings and conversations. It is suggested that the faculties organise joint workshops and seminars with the mentor teachers, having them more in the faculty to discuss the needs of the students from their perspective and to share their experiences directly from the classroom reality. In contrast, supervisors from the faculties should be more actively engaged in the school system and get familiarised with the changes and future ECE teacher needs.

We would make the following suggestions for further research or monitoring and mentoring.

Future research should be focused on finding ways for better cooperation between all the stakeholders for further advancement of monitoring and mentoring. Using pedagogical practice to improve the quality of teacher education, specifically using self-reflection and feedback as a tool of quality measurement, would also be suggested for future research.

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Chapter 6: The role of pedagogical practice in initial teacher education

Laura Naka

Abstract

Theoretical knowledge is only sometimes sufficient for the teaching profession. In addition to knowledge, teacher education also needs practical skills in order to achieve the goals set for it. Subsequently, pedagogical practice may be considered to be the professional support of initial teacher education that simultaneously covers the theories of teaching and teaching competencies in general. The identification of good practices and possible shortcomings helps to improve the quality of pedagogical practice. The present study aims to investigate students' perceptions of pedagogical practice in three dimensions: first, their perceptions about the relationship between the theory they learn in the faculty with the experience in pedagogical practice, their views about the mentors in the school they conduct the practice, and the responsibilities of the supervisors during the pedagogical practice. Moreover, the study addresses the role of supervisors during pedagogical practice in supporting and promoting the personal and professional growth of initial teachers. The study used both quantitative and qualitative research methods, using a questionnaire with 70 students of the Faculty of Education at the University of Gjakova who have already conducted pedagogical practice and a focus group discussion with four supervisors who mentored initial teacher educators. The results derived from the respondents' data are used to reduce the difficulties that arise during the work of the pedagogical practice and recommend possible important changes. In conclusion, even though the students believe that they are sufficiently prepared for teaching during the lectures, the experience during the pedagogical practice challenges them by facing unpredictable situations with the students in the classroom. Therefore, pedagogical practice strengthens student-teachers in their profession and, as such, is of particular importance.

Keywords: ITE, Pedagogical practice, teaching methodology, competencies.

1. Introduction

Student-teachers are not aware of the challenges they may face when teaching students in the classroom. The knowledge they receive in class during lectures is not enough to carry out their duties in practice, since the situations are unpredictable when student-teachers experience such situations in terms of diversity regarding students' different abilities to learn, different learning styles, and different social, economic, and family educational backgrounds. Pedagogical practice is a unique opportunity to prepare student-teachers to overcome these challenges and to develop them professionally. This enables student-teachers to prepare effectively for teaching with a clear selection of content, teaching and learning materials and delivery methods (Kihwele & Mtandi, 2020). Among others, during the pedagogical practice, student-teachers enrich their knowledge in teaching methodology, lesson planning, and evaluation methodology.

Therefore, pedagogical practice plays a crucial role in Initial Teacher Education (ITE) as it helps future teachers understand how to effectively design and deliver lessons to meet the needs of all students. 'Student Teaching is the most important experience in a teacher education programme and is generally based on a country's National Education Policy"'(Aglazor, 2017, p.101). ITE programmes often provide opportunities for student teachers to observe and participate in real classrooms, apply theories and concepts learned in coursework, and receive feedback on their teaching from experienced teacher educators and mentors who are teachers in the primary schools where pedagogical practice takes place. Student-teachers can familiarise themselves with their profession and practice what they have learnt in their educational programmes through pedagogical practice courses (Özdaş, 2018). Through these practical experiences, student teachers develop their teaching skills and gain a deeper understanding of how to create supportive learning environments, differentiate instruction, and assess student learning. In this regard, Oo et al. (2021) suggest that supervising teachers and student-teachers should cooperate more at the beginning of the practicum. The goal of pedagogical practice in ITE is to prepare new teachers to be effective educators from day one in the classroom. 'A definition of pedagogy in teacher education requires consideration of what relevant practice and approaches in student-teachers' professional experience may look like in the higher education settings' (Arnold & Mundy, 2020, p. 11). The main purpose of pedagogical practice is to identify the relationship between the curriculum of the study programme and experience during pedagogical practice in primary education institutions. In the primary and preschool programmes at the faculty of education, theoretical and practical work seems to be reciprocal. The content

of the study programme provides the framework for planning and delivering lessons and experiences that meet the needs and abilities of students. It informs the choices made by teachers about what to teach, how to teach it, and how to assess student learning. Pedagogical practice is a key ingredient of teacher education where students are assigned to schools to practice how to plan and teach lessons and be involved in other school activities (Ode et al., 2020).

Pedagogical practice provides the opportunity for student-teachers to apply theoretical knowledge in real-world settings and to see the impact of their decisions on student learning. An effective pedagogical practice is crucial in influencing student teachers' proficiency in their professional practices (Kihwele & Mtandi, 2020).

Through this experience, student teachers can refine their understanding of the planning programme and make modifications as needed based on the needs and abilities of their learners. Therefore, a balance between theoretical and practical aspects of the curriculum for teacher education needs to be organised (Özdaş, 2018). In this way, the relationship between curriculum theory and experience during pedagogical practice is a continuous cycle of learning and adaptation, in which each informs the other and leads to ongoing improvement in teaching and learning. As Warren et al. (2021) claim, 'Teaching dispositions provide student teachers, teacher educators and initial teacher education (ITE) providers with challenges and opportunities' (p. 122).

Furthermore, the present study seeks to observe the experiences that ITE (Initial Teacher Education) students gain in planning, teaching methodology, and evaluation during pedagogical practice in collaboration with a supervisor. The supervisor has a significant role in pedagogical practice as a resource person, counsellor, mentor, advisor, evaluator, and interpreter of feedback (Ali & Khalid, 2015). ITE students gain valuable experience in planning lessons through a variety of activities during their pedagogical practice, such as observing experienced teachers, participating in lesson planning, creating and delivering lessons, reflecting on lessons, and similar. Student teachers have the opportunity to observe experienced teachers in action and see how they plan and deliver lessons. This provides them with a model to follow and helps them understand the practical application of curriculum theory. They are often given opportunities to participate in the lesson planning process, either on their own or with guidance from experienced teachers. It allows them to practice applying the curriculum and to see how their ideas and plans come to life in the classroom. As student teachers gain confidence, they are given the opportunity to plan and

deliver lessons on their own, either with support from mentors or in a student pedagogical practice. This provides them with hands-on experience in creating and delivering lessons and allows them to see the impact of their decisions on student learning. Student teachers are encouraged to reflect on their teaching and on the learning that took place after each lesson. Furthermore, it helps ITE students identify areas for improvement and make changes to their planning and delivery based on the needs and abilities of their students. Through these experiences, ITE students gain a deeper understanding of how to plan effective lessons that meet the needs and abilities of all students, and they are better prepared to enter the classroom as confident and competent teachers.

During their pedagogical practice, initial teachers also gain experience in teaching methodology. Some of these experiences involve participating in professional development workshops, observing experienced teachers, participating in lessons, and reflecting on lessons. Student teachers often participate in workshops and teaching sessions focused on specific teaching methodologies, such as project-based learning, student-centred instruction, or blended learning. These experiences provide them with an understanding of the principles behind different teaching methods and how they can be applied in the classroom. Student teachers have the opportunity to observe experienced teachers in action and see how they implement various teaching methodologies. This provides them with a model to follow and helps them understand the practical application of different teaching methods. As student teachers gain confidence, they are given the opportunity to participate in the delivery of lessons, either with support from mentors or in student pedagogical practice. This allows them to see different teaching methodologies in action and to understand the impact of their decisions on student learning. After each lesson, student teachers are encouraged to reflect on their teaching and on the learning that took place. It helps them identify areas for improvement and make changes to their teaching methods based on the needs and abilities of their students. Therefore, they are better prepared to enter the classroom as confident and competent teachers who can adapt their teaching methods to meet the needs of their students.

Assessment is one of the most difficult processes that initial teachers identify during pedagogical practice, noting the challenges that mentor teachers go through while they can benefit from this experience. According to Khumalo and Maphalala (2018), teachers internationally are expected to be assessment literate and have the requisite knowledge and skills to assess and accurately report a student's achievement. The initial teachers' experiences in evaluation can vary greatly depending on the school district, the teacher's individual

personality and teaching style, and the school's culture. The study conducted by Irani et al. (2020) recommended assessing the process of identity construction and the teaching quality of student teachers by collecting effective portfolio data as an assessment tool. For this reason, regular feedback and evaluation should be obtained from all the stakeholders of the pedagogical practice programme, and solutions should be sought for the identified problems (Karsli & Yağiz, 2022).

However, some common experiences include feeling pressure to meet certain performance standards, stress over receiving low scores or negative feedback, feeling frustrated with the evaluation process, and feeling unsupported by their administrators and parents. In contrast, some teachers may also find the evaluation process to be helpful in receiving constructive feedback and being able to reflect on their pedagogical practices, leading to growth and improvement. Many teachers may not have received adequate professional development in evaluating young learners, leading to confusion and uncertainty about the appropriate assessment methods and criteria to use. Young learners are still in the process of developing their cognitive, social, and emotional skills, which can make it challenging for teachers to accurately assess their abilities and progress. Teachers may have limited resources, such as time, materials, or technology, to evaluate their students effectively. Hence, formative diagnostic assessment could be employed during the different phases of teacher education and practical training (Kuhn et al., 2016).

Evaluating young learners requires considering both their academic and social-emotional development, which can be difficult for teachers who have limited education in this area. Young learners have a wide range of abilities and needs, and teachers may struggle to develop assessments that are appropriately challenging and engaging for all students. Therefore, a comprehensive and relevant assessment professional development programme should be given to instructors on a regular basis to integrate assessment with daily instruction to improve students' learning (Moges, 2018). There may be inconsistencies in the evaluation standards and practices across schools, leading to confusion and difficulty in interpreting and using evaluation data.

2. Literature Review

Compared with in-service teachers, student-teachers lack real experiences of the teaching profession, and their cognition and evaluation of the teaching profession are more based on teachers as students (Zhao & Zhang, 2017). Novice teachers face teaching realities that often differ from how they had perceived the teaching profession during their academic studies (Sasson et al., 2020).

From the literature used in the study of Mufidah (2019), it was stated that if the student teachers do not have experience before they come to the classroom, it is possible that they will have difficulty performing even a single teaching technique. According to Sasson et al. (2020), teaching experience during studies, within schools and accompanied by an experienced teacher, provides support to the student while reflecting on classroom teaching experience (p. 458). From the results of the study conducted by Thomas et al. (2022), ITE students learned about the unique characteristics of flexible learning and alternative education contexts and developed a range of transferable skills applicable to their future teaching in mainstream school settings. In their study, Caires and Almeida (2005) claim that for the large majority of student teachers, pedagogical practice represents a unique opportunity for the development and consolidation of a significant variety of knowledge and skills. 'The practice of pedagogical supervision in the classroom context should be generalised in Higher Education establishments as a strategy of professional development and support to the reflection on pedagogical practices' (Oliveira Sá & Costa-Lobo, 2019). The central goal of student teaching programmes is to provide aspiring teachers with challenging, relevant, and rewarding field experiences to inculcate essential teaching skills and professional growth (Aglazor, 2017). 'Initial teacher education is the first entry point to the teacher's professional career, it plays a fundamental role: the way it is organised determines both the quality and the quantity of teachers' (Musset, 2010, p.15). According to Caires and Almeida (2005), the variety of pedagogical experiences that take place during pedagogical practice, such as planning, teaching and assessment, dealing with a large number of teaching tools, the resolution of real problems of teaching and education are examples of the richness and variety of the challenges encompassed by this field experience. In real practice, as Zheng and Zheng (2020) emphasise, the focus of teachers' professional development, though acknowledged as a life-long process of learning and developing in the research of a recent decade, is still in the beginning stage. Cretu and Morandau (2020) emphasise that 'Teacher educators have been challenged to reflect on how IE can be addressed as an essential element of teacher education, to implement curricular approaches embedded with different aspects of IE or even to develop their own skills in the field to train future teachers' (p. 3).

3. Research Methodology

A combination of quantitative and qualitative approaches is used in the study that conducted mixed methods. Creswell (2009) believes that the study may begin with a quantitative method in which a theory or concept is tested, followed by a qualitative method involving a detailed exploration of a few cases or individuals (p. 31). The data from the interview will prove or justify the results derived from the questionnaires. As Mohajan (2018) mentions, more emphasis on explaining why people think and behave in certain ways is needed (p. 39).

3.1 Sample and instruments

The study included 70 respondents who completed the questionnaire and four professors for interview discussion (a focus group discussion with four supervisors) who teach in the Faculty of Education at the University of Gjakova. The sample was selected among students of the primary programme, classifying third- and fourth-year students who already have conducted pedagogical practices and have sufficient experience. The purpose was for the students to have as much experience as possible in pedagogical practice with the so-called student-teachers. The majority of the sample is female, and most of them come from rural areas of the municipality of Gjakova, as presented in Table 1. The teachers/supervisors of the Faculty of Education have considerable experience in the supervision of student-teachers. Demographic data of the teacher educators who are part of the focus group are presented in Table 2. The focus group discussion was reached in one of the classes at the Faculty of Education. The questionnaire, created by the author, contains 22 questions (see Appendix 1) divided into three categories, which give the student teachers' perceptions of the importance and role of pedagogical practice in relation to them as future teachers. The second category is the respondents' opinions about the mentors, and the third is about the cooperation of the supervising teacher educators with the students regarding the pedagogical practice. Also, questions for focus group discussion are specifically designed based on the responsibilities of the supervising teacher educators for the students' pedagogical practice (see Appendix 2).

3.2 Data analysis procedure

The first step was the distribution of questionnaires to students. Data from the questionnaires are analysed using the SPSS software, while descriptive analyses are done using data from a focus group discussion. Results are presented in tables divided into three parts according to the questions set for the three categories that were included (i.e., students, mentors, and supervisors.

Meanwhile, discussions in the focus group were recorded, and notes were taken during the conversation for the most important details appropriate for the research, with a special emphasis on the third category of the research aim, which is the responsibility of the supervisors during the pedagogical practice. The opinions of the teacher educators are given for the questions that have been prepared for discussion (see Table 6), referring to the initials of the supervising teacher educators who participated in the focus group. The answers of the supervising teacher educators were based on the foreseen results of the manual for the organisation of the pedagogical practice of the Faculty of Education at the University of Gjakova (see Appendix 3). To respect the authorial ethics of the respecting supervisors and at their request to remain anonymous, the data are presented with the initials T1 to T4.

4. Findings and Discussions

The table below includes some general data from the students/respondents who contributed to the statistical method. The data in Table 1 are the answers to the first three questions in which the respondents were asked to answer the questions without having to choose options.

Table 1. Students'/respondents' socio-demographic background

Gender	F	66
	M	4
Students' dwelling area	Urban	29
	Rural	41
Academic study year and number of already conducted pedagogical practices by students	1st	2
	2nd	9
	3rd	47
	4th	12

Based on the data in Table 1, it is understood that pedagogical practice is planned in each academic year in the primary programme and lasts from four to eight weeks as planned in the study programme of primary education in the Faculty of Education at the University of Gjakova. About 59% of students come from rural areas, while 41% live in the city. It is also clearly observed that the students have completed the pedagogical practices in accordance with the academic year of the studies they are following, though 47 out of 70 respondents have sufficient experience as they have already completed three pedagogical practices according to the curriculum of the study programme, and 12 who are before graduation and have completed all four pedagogical practices as planned in the study programme. The student respondents are mainly between the ages of 19 and 23 years old, with the exception of three of them, who are 28, 31, and 35 years old.

Table 2. Teachers'/supervisors' demographic background

Teacher	Gender Male/ Female	Age	Working experience	Teaching course
T1	F	52 years old	23	Inclusive education with methodology
T2	F	41 years old	10	Difficulties in learning
T3	M	44 years old	9	Developmental psychology
T4	F	51 years old	17	Methodology of learning of mathematics

Table 3. Students' responses about Pedagogical Practice.

	N	Mean	Std. Deviation
Q1. We are notified at the beginning of the academic year about Pedagogical Practice	70	3.4143	1.06992
Q2. We are notified in time about the school where we conduct pedagogical practice	70	2.0714	1.02606
Q3. We are informed about everything we need to know about the pedagogical practice through the campus that is organised at the university.	70	3.7143	.95010
Q4. We are informed about everything we need to know about the pedagogical practice from the professors of the faculty	70	3.6571	.93073
Q5. There is a connection between lectures and exercises with pedagogical practice	70	3.7000	.99782
Q6. The expectations of pedagogical practice are the same as we learn in the classroom	70	3.4286	1.16185
Q7. Pedagogical practice is very important to prepare for teaching and professional development	70	1.8571	.90547
Valid N	70		

According to the first and second questions, students claim that about 43% of them are not notified at the beginning of the academic year about the pedagogical practice, while 21.4% neither agree nor disagree, which shows that the students do not have knowledge until they have to undergo the pedagogical practice. In the third question, about whether the students are informed about everything they need to know about the pedagogical practice through the campus that is organised at the university, the result implies that 50% of them disagree and that 18.6% completely disagree. The organisation of the campus for the implementation of pedagogical practice is foreseen by university regulations, but according to the results, students seem not to receive all the necessary information for pedagogical practice. Moreover, they have the same opinion about the teacher educators, since the largest percentage of the respondents declare that even the teacher educators in the faculty do not give them sufficient time to notify them in advance with the right information for the pedagogical practice. According to the results given by the respondents in the fifth question, about the relationship between theory and practice and the expectations of pedagogical practice, almost half of the students disagree. It seems that the respondents encounter new or other situations when they start the practice and that not all that was studied in class corresponds to the same in practice.

Eventually, over 87% of respondents declared that pedagogical practice is very important for their preparation for teaching and their professional development.

Table 4. Students' responses about the mentor's role.

	N	Mean	Std. Deviation
Q8. The mentor welcomes the student teacher's participation in the class.	70	2.4429	1.21149
Q9. The mentor works closely with the student teachers.	70	2.0000	.85126
Q10. The mentor guides us to carry out the teaching and learning process in the classroom, such as classroom management.	70	1.6714	.58288
Q11. The mentor guides us on the teaching methodology.	70	2.5143	1.13881
Q12. The mentor guides us through lesson plan designation.	70	2.6571	1.19037
Q13. The mentor gives us space by giving us the opportunity to deal with students in the classroom in order to be as close as possible to the teaching profession.	70	2.0714	.92190
Q14. The mentor evaluates us for the practical pedagogy in class.	70	2.0143	.87630
Q15. The mentor always cooperates with the supervising teacher educator for our practical work.	70	4.1286	.65765
Valid N	70		

From the eighth to the fifteenth question, the students answered the questions related to the mentor's role in pedagogical practice. Please note that mentors are the primary school teachers who are in charge of the student's participation and pedagogical practice during the practical work. Almost 63% of respondents totally agree or agree that mentors welcome them when they become part of their classes during pedagogical practice. However, 14% have no opinion or have not understood whether or not they are welcomed by the mentors. Almost 84% of the respondents are satisfied with the closeness shown by the mentors to cooperate with them. In addition, more than 90% affirm that mentors guide them to carry out the teaching and learning process in the classroom, such as classroom management, while a significantly smaller percentage, about 60%, declare that they help in the acquisition of teaching methods and the design of the lesson plan. Regarding Question 13, more than 90% of students claim that a mentor gives them enough space and opportunity to deal with learners in the classroom in order to let them be as close as possible to the teaching profession and give an evaluation of the pedagogical practice that the students do. In contrast, a considerable number of respondents, more than half of them, declare that the communication and cooperation of the mentors with the faculty supervisors are highly lacking.

Table 5. Students' responses about the supervisor's role.

	N	Mean	Std. Deviation
Q16. The supervising teacher educator has shown her/his readiness to prepare us for pedagogical practice before we start it.	70	2.2571	1.15075
Q17. The supervising teacher educator cooperates with us during the entire time of the pedagogical practice.	70	3.7429	.95835
Q18. The supervising teacher educator cooperates during the entire time of the pedagogical practice with the mentor of the school where the practical work is carried out.	70	4.3714	.59397
Q19. The supervising teacher educator takes into account the mentor's evaluation for the final students' evaluation.	70	2.5714	1.24611
Q20. The supervising teacher educator of the faculty evaluates the diary (notebook) that students design during the pedagogical practice.	70	1.6714	.53083
Q21. The supervising teacher educator gives us suggestions for further work in pedagogical practice for the future teaching process.	70	2.2429	1.10906
Q22. How often does the supervising teacher educator come to the school where you are doing the pedagogical practice?	70	4.5143	.92850
Valid N	70		

In Table 4, the results given by the respondents for the teacher educators of the faculty who are included in the quality of student supervisors in pedagogical practice are shown: 72.8% think that the supervisors have shown readiness to inform the students about everything that the pedagogical practice has to do with, but their cooperation during the practice decreases. Therefore, about 75% of them deny that the cooperation between them and the supervisors continues during the period that the students conduct pedagogical practice. Based on the student's responses in Question 19, the only thing that the supervisor considers in the mentor is the evaluation because the supervising teacher educator is apparently based on the evaluation that the mentor makes for the student. In addition, over 92% of the students claim that the supervisor of the faculty is mostly based on the diary that students designed during the pedagogical practice since, in this document, the supervisor understands the work and activities that a student has implemented during the pedagogical practice. Also, during the evaluation, the supervisor gives suggestions and advice that the student should follow in their future work as a teacher. However, 90% of the respondents indicated that the supervisors sometimes, rarely, or never visit them in the school where they do the practical work, which remains one of the shortcomings that is constantly observed in the clear assessment of pedagogical practice.

4.1. Findings of focus group discussion

The focus group discussion was conducted in the faculty of education with four supervising teacher educators who have experience in supervising students during pedagogical practice. Pedagogical practice is carried out in the schools of the municipality of Gjakova but also in other municipalities where the students come from. During the discussion, in addition to the answers given by the supervisors, some opinions similar or contradictory to those given by the students in their answers to the questionnaire were brought out. Moreover, the opinions and comments of supervising teacher educators sometimes justify some of the students' answers. The statements of the supervisors were analysed and labelled into four categories: in providing information about the pedagogical practice to the students, in the connection between theory and practice, in their attendance to monitor the students, and in the evaluation of the pedagogical practice, as given in the table below.

Table 6. Teacher educators' responses on pedagogical practice.

Category 1	
How are students informed about pedagogical practice?	• Students are notified about the pedagogical practice through the student services office. • Students can also get information from the university's website for teaching practice – T2. • The pedagogical practice coordinator notifies the students in time about the place and schedule of the pedagogical practice. T3.
Do you give any explanation to students about pedagogical practice during lectures?	• Before the students start the pedagogical practice, an overview gathering is held, which exclusively refers to the purpose and execution of the teaching practice- T4. • During the lectures, the teacher educators prepare the students for the importance of pedagogical practice and the dedication they must have during this experience - T1. • Not all teacher educators provide information about pedagogical practice, because they consider that certain teacher educators and the coordinator for pedagogical practice are competent for this –T3.

Category 2	
How are theoretical lectures related to pedagogical practice?	• Not everything that is taught during the lectures serves the students to use for pedagogical practice. Sometimes, the courses offer general knowledge that student-teachers need for their academic development but not for the teaching methodology - T2. • Even though I try to tell them that the theory will serve students in the pedagogical practice, the students still find new and unexpected things during this experience - T3. • Of course, they are related, but the situations that are created in the classroom with students are not taught in theory. Therefore, students face unpredictable situations during pedagogical practice – T1.
Does theoretical learning and knowledge in the classroom help students with pedagogical practice?	• To some extent, but not entirely. Lectures in the classroom further enrich them with general knowledge in the field of teaching- T4. • They miss the presence of their young students in the classroom in order to experience the possible challenges that await them in the future – T2. • Teaching methodology is learned, but it does not matter if those methods are not practised, so this could be the difference between theory and practice –T3.

Category 3	
Do you regularly supervise the students during the pedagogical practice? How often do you supervise them?	• When it comes to our cooperation with the students during the pedagogical practice, I can say that not everyone monitors them regularly. I know teacher educators who never go to observe the students in the institutions they are assigned - T4.
How do you get notified about the students' practice schedule?	• Students for whom we are appointed to supervise during pedagogical practice bring us the exact schedule when they are in the school where they perform pedagogical practice, and we go to visit them as scheduled - T2. • The pedagogical practice coordinator notifies us via email about the student candidates and the school or institution where the candidates will do the practice –T1.
Category 4	
How do you assess students for pedagogical practice?	• During the pedagogical practice, the mentors write a report for the students, and the students complete their files with all the activities done. Also, based on their teaching work during the supervision that the teacher educators do with the students, all these activities are collected in a student portfolio, and the assessment is carried out – T4. • We evaluate the pedagogical practice by collecting all the activities that the student does; we also take into account the evaluation of the mentor teacher as well as the performance of the student during supervision-T1.

5. Conclusion

Based on the results of the research, the opinions of the students were highlighted for the cooperation they have with the mentors and supervising teacher educators of pedagogical practice but also with the latter two among themselves. Pedagogical practice is one of the most important processes of the teacher study programme plan. A considerable number of students confirmed that they were not informed about the pedagogical practice at the beginning of the academic year. Meanwhile, regarding the notification in which primary schools will conduct the pedagogical practice, the students are notified in advance. Consultations are held regularly at the University of Gjakova, but the information they receive from this announcement does not seem to be generalised, and they always find new things during practice. This confirms the dissatisfaction that the students express about the cooperation between them and the teacher educators in advance. Moreover, theory and practice do not have much connection, according to half of the respondents. Even though the students believe that they are ready to face the teaching profession as they have been prepared by the theory in the lectures, they are still challenged with new situations during the practice in the classroom. Therefore, most of the respondents believe in the importance of pedagogical practices in their professional preparation as future teachers. The student-teachers in the study conducted by Choy et al. (2013) found that the beginning teachers in this study perceived that their pedagogical knowledge and skills in day-to-day teaching continue to develop into the second and third years of teaching (p.76). According to the data of the respondents, the mentors welcome the students in the class to conduct the practice and help them in all the processes that are implemented before, during, and after the lesson. Mentors support them in the design of lesson plans, in the realisation of the planned activities, in the implementation of different teaching methods, and in the evaluation process. The students are evaluated by the mentors, and according to them, the supervising teacher educators are mainly based on this evaluation, since they themselves have not shown readiness to accompany and monitor students during the pedagogical practice. The respondents respect the support of the mentors but are extremely dissatisfied with the cooperation of the supervising teacher educators with the mentors. Usually, at the end of the practice, the supervisors ask for the diary from the student, where they are informed about the activities students have implemented during the pedagogical practice, as well as the reference written by the mentor, from which they are based to evaluate the students for their practical work.

Further, in the discussions with the focus group, it is observed how important pedagogical practice is to prepare students for teaching and to face challenges and unforeseen situations with young learners. Although they learn from theory in the study programme courses, practice plays the main role in the preparation of teachers.

Recommendation

The study recommends pedagogical practice should be developed when all the mechanisms for this process have been provided in advance in order to be successfully implemented. The study recommends the following:

- the pedagogical practice coordinator should identify the teacher educators who do not properly supervise the students during the practice and report on the responsibilities they have;
- at the beginning of the year, the pedagogical practice manual should be distributed to all students;
- cooperation between school mentors and supervising teacher educators should be in balance with the workload;
- the assessment of the pedagogical practice should be done by the supervisor directly from the presentation of the student's teaching in the classroom and provided tasks as required for the pedagogical practice.

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Appendix 1. Questionnaire for students

Dear Student,

As a student in the Faculty of Education, you have already conducted one, two, three or four pedagogical practices. Therefore, please answer the questions in the questionnaire in order to implement the research on pedagogical practice implementation. We assure you that the questionnaire is anonymous.

Thank you in advance!

Gender: ◯ **Male** ◯ **Female**

Year of Study: ◯ **1st** ◯ **2nd** ◯ **3rd** ◯ **4th**

How many pedagogical practices have you conducted?

◯ **1** ◯ **2** ◯ **3** ◯ **4**

Q1. We are notified at the beginning of the academic year about pedagogical practice.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Q2. We are notified in time about the school where we conduct pedagogical practice.

- Totally agree
- Agree

- Neither agree nor disagree
- Disagree
- Totally disagree

Q3. We are informed about everything we need to know about the pedagogical practice through the campus that is organised at the university

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Q4. We are informed about everything we need to know about thepedagogical practice from the professors of the faculty

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Q5. There is a connection between lectures and exercises with pedagogical practice.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Q6. The expectations of pedagogical practice are the same as we learn in the classroom.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Q7. Pedagogical Practice is very important to prepare for teaching and professional development.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Mentor[1] (teacher in the school)

Q8. The mentor welcomes the student/teacher's participation in the class.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Q9. The mentor works closely with the students/teachers.

- Totally agree
- Agree

[1]The teacher at the school where the practice is carried out

- Neither agree nor disagree
- Disagree
- Totally disagree

Q 10. The mentor guides us to carry out the teaching and learning process in the classroom, such as classroom management.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Q11. The mentor guides us on the teaching methodology.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Q12. The mentor guides us through lesson plan designation.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Q13. The mentor gives us space by giving us the opportunity to deal with students in the classroom in order to be as close as possible to the teaching profession.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Q14. The mentor evaluates us for the practical pedagogy in class.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Q15. The mentor always cooperates with the supervising teacher educator for our practical work.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Supervisor[2] (teacher educators of university)

Q16. The supervising teacher educator has shown her/his readiness to prepare us for pedagogical practice before we start it.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Q17. The supervising teacher educator cooperates with us during the entire time of the pedagogical practice.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Q18. The supervising teacher educator cooperates during the entire time of the pedagogical practice with the mentor of the school where the practical work is carried out.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

[2]The teacher educators of the faculty who are charged with delivering and monitoring the student's pedagogical practice

Q19. The supervising teacher educator takes into account the mentor's evaluation for final student evaluation.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Q20. The supervising teacher educator of the faculty evaluates the diary (notebook) that students design during the pedagogical practice.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Q21. The supervising teacher educator gives us suggestions for further work in pedagogical practice for the future teaching process.

- Totally agree
- Agree
- Neither agree nor disagree
- Disagree
- Totally disagree

Q22. How often does the supervising teacher educator come to the school where you are doing the pedagogical practice?

- Always
- Usually
- Often
- Sometimes
- Rarely
- Never

Appendix 2. Focus group protocol

In order to carry out the discussion and to be within the scope of the topic, some of the key questions for the realisation of the focus group were prepared.

How are students informed about pedagogical practice?

Do you give any explanation to students about pedagogical practice during lectures?

How are theoretical lectures related to pedagogical practice?

Does theoretical learning and knowledge in the classroom help students with pedagogical practice?

Do you regularly supervise the students during the pedagogical practice? How often do you supervise them?

How do you get notified about the students' practice schedule?

How do you assess students for pedagogical practice?

Appendix 3. Organisation of pedagogical practice in the faculty of education in UFAGJ

Primary Education
pedagogical practice I First academic year; the second semester; 4 weeks; 5 ECTS It is held in May, every Tuesday
Teaching Practice II Second academic year; the fourth semester; 5 weeks; 6 ECTS It is held in April, every Monday and Friday
Teaching Practice III Third academic year; the fifth semester; 7 weeks; 6 ECTS It is held in November, every Monday and Friday
Teaching Practice IV Fourth academic year; the eighth semester; 7 weeks; 6 ECTS It is held in February – April, every Wednesday and Thursday
Description During the pedagogical practices, students are introduced to the importance of children's development in primary education. Students obtain practical knowledge of the pedagogical approach and learn about their work with children from the first to the fifth grade. Also, they begin to be trained for the use of contemporary methods with children of this age by applying creative and educational activities through the programme plan according to the curriculum, games and various activities with the aim of developing the critical and creative thinking of children in primary education.
The purpose of pedagogical practice is to: • prepare cadres of future teachers; • future students to have experience from practical work in the professional field; • high school students to help elementary school children in their physical, social, emotional and cognitive development; • acquire methodologies from contemporary trends.

Supervisor:
The supervising teacher is appointed by the student affairs officer.

Specific instructions:

The responsibilities of the supervising teacher educator are:

- The supervising teacher educator receives the data for the students assigned to him for supervision (who is the mentor teacher, the school where the students do their pedagogical practice, etc.);
- To meet the mentor so that they can get to know each other and work together (to work together for the evaluation of students);
- To inform the mentor about the curriculum of pedagogical practice I, as a theoretical course that is held in the first semester;
- Have meetings with teacher-students to give them instructions about the tasks they have during their practical work;
- To ask students required tasks based on the course requirements and give immediate feedback
- To meet each student at least once a week;
- To evaluate the students who supervise according to the specified points (marked in the student's tasks as below).

Student's responsibilities:

- Students are obliged to attend the predetermined school according to the Schedule;
- Students should guide their mentors about teaching processes and methods;
- Students have to prepare several topics for daily, weekly, or monthly planning according to the Learning and Development Standards document;
- Students will prepare or adapt a child observation instrument for a specific area of development;
- The students will prepare the daily lesson for each hour at school and write it down in the diary. The diary is checked by the supervising teacher at the end of the practical work;
- students must face the real challenges they may have while practising their profession as teachers, such as with children with special needs, gifted children, children with different abilities and needs, etc.

Results expected from pedagogical practice:
After completing the pedagogical practice, students will be able to:

- Build knowledge of the basics of primary education, child development, and the creation of a suitable educational environment for children of this age;
- Know the system of educational policies and the documentation that they will work within their daily work;
- Break down the curriculum into activities planned for children, orienting their work according to the approach with the child in the centre;
- Organise educational activities, aiming at achieving learning outcomes, foreseen with the Kosovo Curriculum Framework, according to the relevant fields;
- Apply contemporary methodologies while working with young learners, enabling them to develop physically and linguistically, develop basic mathematical and artistic concepts, enabling children to be skilled for well-being, life and work;
- Implement different forms of observation of the student, through which they manage to identify their individual needs and interests;
- Apply comprehensive approaches in the process of realising the plan and programme, giving equal opportunities to each of them;
- Gain skills in organising their professional development, working in teams;
- Implement different approaches to partnership with family and community;
- Reflect on their continuous professional development, contributing to raising and advancing the quality of work with primary education children.

REMARKS

Based on this description of pedagogical practices, the duration of the practice, the responsibility of the student and the supervising teacher educator, the purpose of the pedagogical practice, and its importance, a draft of the pedagogical practice for the faculty of education will soon be designed.

Chapter 7: Transmission of knowledge in constructivism and the teacher's teaching role

Janez Krek, Tatjana Hodnik

Abstract

In the second half of the previous century, an ideology of teaching was established in the pedagogical arena that 'modern', 'real' teaching is that in which the teacher withdraws as a link between the content and the learners. This false message, combined with the pedagogical fallacies of progressivism, has led teachers to believe that they are teaching 'right' simply by applying predetermined 'right' methods and forms of teaching, irrespective of the objectives and the context. These are the methods and forms that ideology proclaims to be 'progressive' and those that are supposed to allow the learner to 'construct his/her own knowledge', which is not possible. The wrong starting points inevitably pervert teaching into effects that are contrary to the aims of teaching. Taking the general premise that teaching methods are, without exception, a transmission of knowledge, and within the context of teaching mathematics, we argue that in a school context, without the teacher's intervention, the learner cannot construct knowledge, while at the same time, the teacher's role as an intermediator of knowledge construction does not contradict the theory of constructivism. In discussing notions of a 'new teacher role' that withdraws the teacher as an intermediator of knowledge, we show that the reverse follows from constructivism theory, namely an emphasised instructional role for the teacher. We maintain that there are no clear-cut conclusions from the epistemology of constructivism for the teaching of the teacher. Based on the preceding arguments, we conclude that the withdrawal of the teacher from the role of direct teaching also entails the withdrawal of the teacher from the relationship with the student, which has negative consequences for the teacher's authority and, consequently, for the student's knowledge and attitudes towards knowledge.

Keywords: transmission of knowledge, constructivism, teaching mathematics, the teacher's teaching role, teaching methods, teacher's authority

1. Introduction

One of the more current theoretical frameworks for research on teaching and learning has been constructivist theory, which has been the subject of many interpretations over the decades and continues to be so today. Constructivist theory is fundamentally an epistemological theory (Glasersfeld, 1984) and not a pedagogical theory; it is a theory about how we come to know but not a theory about how to teach and transfer knowledge to learners. Despite this, or precisely because of it, the constructivist theoretical framework is too quickly transformed in the pedagogical arena into ill-conceived understandings and naive notions of how one should teach in order to teach according to constructivist theory.

One such notion, which has already turned into a dogma, is that 'the learner constructs his own knowledge'. From an epistemological point of view, this is a naive realist perception that understands thinking in a physical sense: that the individual is the 'body and carrier of his thinking', who as such, of course, always 'constructs' his knowledge 'by himself', since no one else can do it for him. From the point of view of planning and delivering lessons, this is not helpful. It creates a notion that implies a break, a divide between teacher and student, and separates the teacher absolutely from the student 'who constructs knowledge himself'. If this were true, we would also have to accept that teaching approaches have no particular influence on the course of students' acquisition of knowledge, since the student is, in any case, 'the body and the vehicle of his thinking', in which learning takes place.

The term 'constructivism' can be somehow understood already from common discourse and is, therefore, quickly subject to a pre-theoretical understanding ('constructing' knowledge is 'creating' and 'building' knowledge). The popular slogans on teaching and learning, which are the result of various ideas of progressive pedagogy, can, therefore, also easily be placed in such a wide-open, non-conceptually defined meaning of 'constructivism'. Egan (2009) shows that so-called progressive education has generated a number of problematic notions about teaching and learning, which were already being developed in the 19th century by Spencer: 'The child must be active not passive; learning occurs best through play in the early years; new knowledge must be connected with what children already know and will thus initially be concerned with the local, the concrete and the simple; learning should be pleasurable and not forced; and so on' (pp. 42–43).

Similarly, in the context of his analysis of the notion of creativity, Leví-Strauss (1985) showed the fallacy of pedagogical notions, such as that the intellectual powers and spontaneity that a child possesses are sufficient in themselves and exclude any coercion, leaving the school with the role of not hindering the child's free development. Spencer's initial idea that learning should be enjoyable and not coercive has, to date, established the belief that 'real' or 'good' learning is only that which is fun; repetition in learning, in contrast, is ruled out and lumped in with the label 'bad' and should be avoided. There is a consolidated image of what 'modern' teaching is supposed to be, which is consistent with 'constructivism': that is, the withdrawal of explanation and the associated frontal teaching, the favouring of group work, and the method of consolidation of knowledge has come into disrepute. In the context of constructivism, it would be difficult to see teaching being linked to the method of explanation or to direct teaching, nor would it be expected that 'traditional' teaching would be linked to group work. Knowledge consolidation is another method that would be more likely to be attributed to 'traditional', 'outmoded' teaching than to a constructivist context.

As these ideas have become the ruling ideology of the pedagogical arena, it is important in higher education programmes to teach future teachers that students understand constructivism as an epistemological theory and that they acquire more complex ideas than the above about what follows from constructivist epistemological theory in relation to teaching.

In general didactics, there are different criteria for dissecting teaching methods in the classroom. We start from the thesis that teaching approaches are not in themselves justifiable to be evaluated in the sense of any one of them being a priori more or less valuable. Each can contribute to the quality of teaching if used thoughtfully by the teacher to achieve the stated learning objectives. This chapter goes on to argue that a teacher's naively realistic understanding of teaching approaches can lead him or her to pervert the means of teaching into the ends, and conversely, knowledge, which should be the end of the process, becomes a means of achieving the 'real' ends of the pedagogical ideology, for example, that 'the learner should be active and not passive', and similar. We argue that the epistemological theory of constructivism does not imply that the teacher should withdraw from teaching as an intermediator of knowledge; on the contrary, the teacher should be highly engaged in his/her teaching role. In the following, we highlight the predictable consequences for students' attitudes towards knowledge that arise from teaching in which the teacher withdraws from his/her teaching role.

2. Perverting knowledge as an end into a means of 'proper' pedagogical approaches

Spencer's idea, which has become the watchword of 'modern pedagogy', that the learner should be active and not passive, can be simplistically understood as the physical activity of the learner, for example, using concrete objects, didactic games, movement activities, and similar. Since this 'active' is seen as the opposite of 'passive', any activity, since activities are 'activity and not passivity', should in itself stimulate thought processes. Therefore, it is no longer considered necessary to be concerned primarily with whether or how a particular activity supports (or does not support) the thought processes for the acquisition of a learning objective or the attainment of knowledge.

Once we start to believe in such a phantasmatic discourse, we think it is right, for example, in the dichotomous opposition of abstract and concrete knowledge, to teach with as many 'concrete' examples as possible, and preferably with activities. As a matter of fact, all knowledge is abstract, and the relationship between the abstract and the concrete is always complex. Let us examine this with an example from teaching mathematics. There is no doubt that the use of different representations is essential in the teaching of mathematics. However, in teaching, the path to the abstract through concrete representations is not straightforward. We will give just a few examples to illustrate the complexity of using concrete representations in mathematics teaching. In the case of a teaching aid that materially represents a mathematical concept, the usefulness of the teaching aid for teaching that concept can be problematic. For example, the Dienes models of the place value system, in which the learner must already have some knowledge of the decimal system in order for the representation to be meaningful to him/her, while at the same time, the effect of the use of the representation is supposed to be precisely the learner's knowledge of the decimal system. The problem is that the student's prior incomplete knowledge and a new truth for him/her are combined in the same situation. This is why the use of this material at the end of the last century, when the issue was more topical, was the subject of various studies, which contributed to the resolution with rather contradictory results (Beishuizen, 1999; Thompson, 1992; Resnick & Omanson, 1987, etc.).

However, if unstructured material (anything chosen by the teacher to illustrate mathematical ideas) is used in the classroom, the problem is reversed, because it can be used in a way that does not lead to new mathematical knowledge for the student but is a kind of 'enrichment' of the lesson. Also, the teacher may

sometimes resort to some concrete representations, not necessarily connected to mathematical content, only to provide variety, to make the lesson 'dynamic', to remove the effort of learning for the student, not to achieve the objectives. For example, if the teacher wants to reinforce addition in as 'varied' a way as possible (didactic games, ICT, movement tasks, etc.), he/she may overlook the need to reinforce it systematically, in a structured, part-by-part way, rather than by randomly selected calculations each time, without a clear plan. (Of course, with the above approaches, students can also reinforce addition in an appropriate way, provided that the conditions for this are met.) In Moyer's (2001) study, teachers defined the time spent working with manipulatives as 'fun mathematics', offering the manipulatives as a reward for appropriate behaviour; in contrast, the time spent learning procedures, concepts, solving problems in textbooks and algorithms was described as 'real mathematics'.

Any representation of a concept must be considered in terms of its relationship to the mathematical content and its role for the learner; otherwise, the manipulatives that should be the means to the learning goals become the goal (which in this case is entertainment), and the learning goals become the means. The teacher's understanding of the use of teaching material is based on his/her understanding of mathematical concepts and his/her understanding of the learning process. The quality of the use of representations of concepts requires links to be made between the different external representations (concrete, graphical, symbolic and speech) as well as between the external and the internal (thought processes). The inclusion or not of, for example, a concrete representation in a lesson is not a key indicator of the quality of the lesson. It may be included but not made meaningful, for example, when there is no connection between the concrete representation and the mathematical concept (e.g., introducing written subtraction with carrying with place value models is not meaningful because written subtraction with carrying is based on the 'rule of difference', which cannot be represented in a way that is comprehensible to the learners with the models). It can be involved, even planned, but without any real reflection on the extent to which it really supports the intended goals or thought processes of the learner. For example, if we want to teach the learner to add up to a certain range of numbers, then demonstrating addition with a concrete representation leads to counting the objects that represent the addends, not to computation; the number strip is the more appropriate representation in this case because it stimulates thought processes that the learner can carry out even in its absence.

A concrete representation may not be included deliberately in the teaching of a concept, because its presence might distract students' thought processes or lead to misconceptions (e.g., representing the intersection of two lines with straws and a model of a ball behind a point). Starting from the representational mappings model (Hodnik, 2020), a quality process of teaching mathematical concepts requires that the learner is enabled to make connections between different external representations (from the perspective of the model, it is about understanding) for which the basic condition is that the learner gives meaning to each external representation (from the perspective of the model, it is about meaning).

The path to abstraction in mathematics can only be achieved through reflective concreteness. And a similar reflection is a characteristic of teaching in all subject areas in general.

3. The teaching role of the teacher: the teacher's role as an intermediator of the construction of knowledge does not contradict the theory of constructivism

The differences that have been established through these pedagogical currents, which may have had certain rational foundations, such as the opposition to violence and authoritarianism in schools, have led some time ago to the construction of the so-called new role of the teacher. Descriptions of this role can be traced over many decades. For example, Terhart (2003) writes that according to constructivism, the responsibility for learning lies with the learner. This allows and demands a new, relaxed attitude on the part of the teacher. There can be no more teaching in the sense of transmitting prepared packages of knowledge divorced from concrete situations, nor can such teaching be morally justified. However, teaching can stimulate and (hopefully) trigger learning and is, therefore, able to contribute to truly high-level, permanent learning. The task of the teacher consists of setting up, or staging, learning environments in which learning as co-constructing and restructuring in social and situated contexts becomes more probable. The learning environments particularly suited for this purpose are those that take into account the situation-bound and constructive character of any kind of learning in which learners can independently make their own way.

For didactics following constructivism, the highest general goal of teaching and learning in school is to help build a world in which human beings are able to leave behind all dogmatism, lead a self-determined existence, and live in tolerant and relaxed togetherness with other human beings and nature, all on the basis of insight into and experience with the constructedness of all knowledge (Terhart, 2003, pp. 32–33).

In Slovenia, we can trace such descriptions back to the early 1980s:
The teacher's task is less and less to impose knowledge and more and more to stimulate thinking; leaving aside their formal functions, teachers have to become, and in fact increasingly are becoming, advisers, interlocutors, people who help to expose opposing opinions rather than giving absolute truths (Education Today and Tomorrow, 1980, pp. 43–44).

The teacher's role should, therefore, move away from the authoritative provision of information and towards 'diagnosing the needs of students', motivating and encouraging learning and testing the knowledge acquired (cf. Education Today and Tomorrow, 1980, p. 59). The teacher is becoming less and less the leader of educational work, the main factor in all efforts to shape students, and is turning into a counsellor who supervises, encourages, and teaches how the child should learn.

It would appear, then, from the theory of constructivism that 'the teacher's teaching role is being weakened' and that 'the teacher as the link between the content and the students is being withdrawn'. Our thesis is the opposite: it is precisely the teacher's emphasised teaching role that follows from constructivism. First, it is important to be aware of the fact that all knowledge is specifically a human product and not part of nature. This is assumed, for example, by Strmčnik (2001), who, in answering the question 'what is knowledge', critically notes that we often resort to new-age explanations, among others, that 'knowledge is a subjective transformation and (re)construction of existing knowledge and experience, and therefore subjectively derived, that knowledge and science are the result of personal and social agreement, not of objective origin and verification, etc.' (p. 139).

From an ontological point of view (i.e., the question of how knowledge exists), knowledge is thus a socially established construct that fundamentally exists outside the individual as a 'social reality'. The social production of knowledge, of course, involves a series of social processes at different levels. First, it is created

and validated by processes within particular scientific disciplines that establish what is true on the basis of pre-established concepts and specific methodologies. The field of 'truth-finding' in science is followed by processes in society in which the knowledge acquired is established into socially valid truths and becomes a convention, a 'social agreement'. Finally, a certain amount of knowledge enters the school curriculum. Knowledge is thus formalised and validated in the curriculum in the form of objectives and knowledge standards. Through these processes of verification, knowledge is therefore objectified, but it is also objective in the sense that it exists in the form of symbolised human language and formalised categories that establish truth outside individuals. The discursive and formal character of knowledge allows it to be passed on, and this is also fully true of the knowledge that is passed on from the older to the younger generation in the school system.

Therefore, it is necessary to distinguish strictly between at least three different processes of knowledge acquisition: the true invention of knowledge, which is arrived at by experts in a scientific discipline on the basis of a scientific methodology and involves a social process of truth-verification; the acquisition of new knowledge for the learner at school, which of course has already been discovered and verified; and the dissemination and deepening of the 'not-quite-new' knowledge through repetition and consolidation. All the processes in school in which the student acquires or consolidates knowledge that is new to him or her are subject to a certain degree of autonomy on the part of the student, and the teacher must put him or her in that role, but any new knowledge that he or she acquires is always predetermined.

In the school context, therefore, the teacher is necessarily the intermediary between the socially existing content of knowledge and the student's learning. One of the fundamental conclusions, which, as we have shown above, has been present for many years in the pedagogical arena, that the teacher should withdraw as a link between the learning content and the learners, is wrong from the ontological point of view of the existence of knowledge and establishes a completely wrong idea of the role of the teacher. In Seven myths about education, Christodoulou (2014) analyses, as the second myth, the idea that teacher-led instruction is passive. She notes that many theorists are very hostile towards certain teacher-directed methods of learning facts, which are seen as passive and dehumanising. They argue that because such methods are passive and dehumanising, they are actually ultimately ineffective at teaching the facts. It is not just more moral but more effective for students to learn all the facts

they do need through a process that involves much less teacher guidance. If the teacher designs a learning environment well enough, students will be able to learn with minimal guidance or through discovery (Christodoulou, 2014, p. 27). The author asks, however, is it possible for students to independently learn all the knowledge they will need through well-designed learning experiences that involve minimal teacher instruction or talk? And her answer is: it is not. These arguments gain plausibility through a fundamental logical error. They argue, correctly, that the aim of schooling should be for students to be able to work, learn, and solve problems independently. However, they then assume, incorrectly, that the best method for achieving such independence is always to learn independently. This is not the case. Teacher instruction is vitally necessary to become an independent learner (Christodoulou, 2014, p. 36).

Christodoulou (2014) also critiques Freire, who criticised teachers who force their students to chant facts they do not understand. She points out, however, that he does not conclude from this that teachers should explain to their students the meaning of four times four and the significance of capitals, as well as help them to memorise such facts. He concludes instead that there should be no memorising at all and that there should be no teacher explanation either. She further mentions that Ofsted reached the same conclusion, although they had not even encountered the bad practice Freire saw. Christodoulou argues that this is a baffling overreaction: to move from legitimate criticism of mindless rote learning to the complete denial of any kind of teacher-led activity. The solution to mindless rote learning is not less teacher instruction; it is different and better teacher instruction. There is one other point that needs to be made. Independent learning suggests a reduced and sometimes even non-existent role for the teacher (Christodoulou, 2014, pp. 37–38).

Modern didactics in Slovenia and elsewhere (Kirshner, 2015) put teachers in a schizophrenic situation. On the one hand, didactics seems to accept the naively realistic, trivial thesis that knowledge 'must be reconstructed by everyone through his own mental activity' (Marentič Požarnik, 2001, p. 17), and the resulting rhetoric that 'in educational methods, the focus is on the learner's acquisition of knowledge through his own direct activity' (Blažič et al., 2003, pp. 331–332), and that it accepts the general view, which is established on the dichotomy that 'in the transition of teaching methods to education methods, the evolutionary progress of the educational process from the traditional explanatory-mediative one to a process of communication and interaction between teachers and students is also reflected' (Blažič et al., 2003, pp. 331–332), and the related trivial

perception in which this transition is seen as 'a transition in which students, in accordance with their psychological conditions, acquire knowledge and other achievements of the educational process to the greatest extent possible through their own mental activity' (Blažič et al., 2003, pp. 331–332). This trivial starting point leads to an incomplete understanding of the teaching and learning process because it assumes that the learner is placed in a position in the 'traditional explanatory-mediating' process in which the student does not acquire knowledge through his own mental activity. The acquisition of knowledge by the learner in the application of any of the forms and methods of work requires the learner's own mental activity. When didactics thus seems to accept the dichotomy between the 'traditional' (= teaching methods) and the 'modern' (= education methods), it is immediately followed by the caveat that the dichotomy between the 'traditional' and the 'modern' is about changing teaching, not abolishing teaching (Blažič et al., 2003). This message, in which 'teaching' is labelled traditional and 'education' is labelled as what is supposed to replace it, and the further justified warnings by 'didacticians' that this transition does not mean the abolition of teaching, puts the teacher in a schizophrenic situation, in which he/she should be replacing the traditional explanatory-mediative 'teaching' with 'education', defined as communication and interaction, while, in contrast, the warnings point him/her in the opposite direction, that he/she should not do so, because even in this process of 'education', the teacher's teaching role remains crucial.

The opposition to direct teaching is linked to the assumption that the teacher must avoid explanation. Explanation cannot, in principle, be avoided in school, but it is also essential that explanation be interwoven with discussion, since it is through discussion with the students that the teacher gains insight into their prior knowledge and engages them in thought processes. As an example, the teacher introduces the concept of the perimeter of a rectangle in primary school. The teacher introduces the concept by first checking the students' prior knowledge or experience of the concept of perimeter by asking what a tailor measures when ordering a suit or what information is needed to contour a room with decorative mouldings, and similar examples. The teacher includes different contexts for perimeter in order to 'match' the students' prior knowledge as much as possible. When you allow the students to talk about their prior knowledge through the discussion, it only becomes visible to the teacher. Starting from the students' prior knowledge, the teacher then gradually introduces a difference to this prior knowledge by means of new knowledge, thus at the same time opening up the students' ignorance. To do this, she continues by addressing a situation that is still

close enough to the students' established background knowledge, asking them, for example, how they could fence in a garden that is rectangular in shape. She asks them this because she wants to introduce the perimeter of a rectangle later, which as a concept differs from the established prior knowledge in that it is not a perimeter in the sense of 'going around', 'encircling', but a calculation of the sum of the lengths of the sides of a rectangle, which is new for the student, and which further leads to additional ignorance (e.g., how to calculate the perimeter of an arbitrary polygon, a circle, an arbitrary shape, just to name a few possibilities). Returning to the fencing of the garden, the teacher, by carefully structuring the questions and linking the different representations, and above all by allowing the student to state his/her understanding, will lead to the conclusion that in order to fence the garden, it is necessary to measure the length and width of the garden and to carry out the corresponding computational operation.
In the reification phase, when the communication of the idea is no longer linked to a concrete reality but to a mathematical object, in our case, a rectangle, for which we do not necessarily have a specific reference object (the floor of the room, the shape of the garden, etc.), the teacher will, again in the link between explanation and discussion, lead the student to the knowledge of the perimeter of the rectangle, namely that the perimeter of the rectangle is calculated by adding up the lengths of all the sides of the rectangle.

But how does the teacher argue this new truth about perimeter for the student? The argumentation here is not in terms of proving an objective mathematical truth but on a logical sequence of steps from the student's prior knowledge of the perimeter to his new knowledge of the perimeter of the rectangle. If we were to analyse the approach described in a lesson, it would be impossible to separate the explanation from the discussion. The student's prior knowledge is the starting point for the teacher's organisation of the experience, so the teacher cannot start the explanation without discussing the prior knowledge. Once the prior knowledge of the students has been established, however, mere explanation, if understood as the speech of one, is no longer meaningful/justified, since the student, because of his/her demonstrated prior knowledge, can participate in the acquisition of a mathematically structured concept if s/he is guided appropriately by the teacher and has clear objectives in doing so. The teacher supports the explanation by asking appropriate questions when teaching the perimeter; however, at the same time the explanation (new knowledge about the perimeter) also supports the discussion; the discussion about the perimeter in everyday life leads in the direction of acquiring new knowledge if it is constantly supported by the explanation, by the mathematical reasoning of the discussion,

but at the same time the explanation about the perimeter of the rectangle can be carried out because it is constantly supported by the discussion, which develops in the direction of acquiring this knowledge precisely because of the explanation. It can be concluded that the theory of constructivism implies an emphasised instructional role for the teacher. In the next section, we address the question of whether it follows from constructivist epistemology that the teacher should use particular methods and forms for teaching.

4. There are no clear-cut conclusions from the epistemology of constructivism for the teaching of the teacher

Despite conceptual differences in the understanding of constructivism, proponents of constructivist theory generally agree that 1) all knowledge is constructed, 2) there are cognitive structures that are activated in the processes of construction, 3) cognitive structures are constantly evolving (intentional activity causes transformation of existing structures), and 4) the acceptance of constructivism as a cognitive theory leads to the acceptance of didactic constructivism (Noddings, 1990). The theory of constructivism, which, as stated, is essentially an epistemological theory (Glasersfeld, 1984), is based on two key premises: first, the cognitive activity of the individual aims at establishing laws in the experiential world; second, the establishment of laws presupposes experiences that are continuously judged by the individual in terms of equivalence and individual identity (das gleiche, dasselbe; stesso, medesimo). This conceptual starting point is extremely general and non-prescriptive (it is not a 'guide' for pedagogical practice). These two key points do not offer any unique derivations for the teacher's teaching. Let us explain with the following example.

An experience involving elements a, b and c becomes for an individual a-b-c mental object; a new element in the experience, for example, x, forces the individual to accommodate the mental structure into a new mental object (e.g., a-b-c-x). Suppose that the objects a, b, and c are the mathematical concepts of triangle, square, and rectangle. The mental object that connects these individual concepts is a new concept (i.e., 'polygon'). If we were to add an x to this object (e.g., a circle), the mental object a-b-c can be changed to a-b-c-x. In order to be able to express a new mental object, the learner must first analyse it (judge it in terms of equivalence and individual identity), identify the differences and also determine whether the new mental object has such properties that it would be appropriate to construct a new concept for it. Of course, in this case, which is

typical of the knowledge to be acquired by students at school in general, this 'new name' for the concept already exists in the field of mathematical knowledge, namely the concept of 'shape'. However, in principle, the student cannot know that this 'new' mental object for him/her is 'already' a mathematical concept that already has a certain name, of course, until the Other (teacher or someone else) reveals this 'name and concept' to him.

Let us return to the example of the mental object a-b-c. If a teacher wants to stimulate learning with a new object, x, there can be nothing 'neutral' about x. It must be included thoughtfully in relation to the previous mental object and in relation to the context of the knowledge and the goal he or she wants to achieve with the students. If the teacher's aim is for the students to learn about the concept of shape, he/she will include such objects and conduct the lesson in such a way as to enable the students to learn about the concept of 'shape' through the cognitive process of equivalence and individual identity (which establishes distinction). It is in this mediation, which leads the student to new knowledge, that the teacher's role is crucial. This is to select the correct representations of the object (= shape) and, for example, on the basis of the activity of classifying the representations of the object and guiding, for example, that the student, based on his experience with polygons, and supported by the teacher, recognises a circle as a bounded part of a plane (as is the case for polygons) and, at the same time, introduces the notion of a shape (a bounded part of a plane, either with straight lines or with a curved line) in mathematically correct language that the student understands and can understand. The student must, therefore, recognise that although a circle is also a bounded part of a plane and thus joins the group of shapes that includes polygons, because it is bounded in a different way from polygons, a circle is a shape but not a polygon.

The teacher must manage these processes of knowledge acquisition in a very deliberate way so as to maintain a reference to previous knowledge when building on it, that is to say, to maintain equivalence, which at the same time introduces difference, which is again new knowledge for the student, and the relation between the same and the different must be such that the difference is not too big for the student and would lead to incomprehension, and not too small, because it would not lead to new knowledge. For example, a teacher may prepare different activities to learn about symmetry in primary school (which is the aim in different years of primary school mathematics), and although the activities are different, the 'diversity' of the activities only brings equivalence to the thought processes; thus, in this case, they do not build on the knowledge

already acquired. On the contrary, if a learner repeats a certain way of doing maths or, for example, solving a certain type of text problem, followed by problems that are not exactly the same as the previous ones (they are some variation of the previous problems), this offers the learner the opportunity to enter into a different (new) mathematical thinking and to identify a pattern in the problems that have been repeated. The learner is not aware of the pattern in the repetition of the tasks until confronted with a different task (Watson & Mason, 2006). In other words, the variation or difference in the tasks allows the experience of understanding this difference precisely because this difference enters into the regularity of the repetitions.

The teacher is a representative of society and an intermediator of 'societal knowledge'. Since he/she is the intermediator of objective (i.e., socially validated and existing) knowledge, he/she must be aware that teaching as a whole is the transmission of previously socially established knowledge. In other words, the transmission of socially existing knowledge is the universal foundation of teaching, which overdetermined all possible teaching and education in general. Therefore, the same is true of the student and learning: although the student's individual learning is a process of knowledge acquisition that is open and unknown to both the teacher and the student, the knowledge to be acquired is already known and is therefore not something that the student has yet to invent or could even discover on his own, due to the fact that knowledge is already objectively socially established prior to this individual process, that the objectives and knowledge standards of the curriculum are known and established, that textbooks are written, and similar.

Frontal teaching by the teacher, which is one of the possible social forms of knowledge transfer, has as a phenomenon the most obvious appearance of 'transmission'. This appearance, which may be more blurred in other social forms (group or individual work), can create the impression and understanding that in a form such as group work of students or in individual working methods such as discussion, the teaching process is not a transmission of knowledge. In all forms and methods of work, we transmit knowledge to the learner who is trying to acquire it. Therefore, without exception, forms and methods of work are a transmission of knowledge. The universal principle that superordinates teaching (i.e., the transmission of socially existing knowledge) does not exclude the teacher's choice of content and professional autonomy in the choice of methods and forms of work, but a certain degree of choice must also be given to the student, in view of his different abilities and interests.

Despite certain conceptual and formal differences that characterise the structure of knowledge in different scientific disciplines, the argument developed in this way is transferable to all areas of different scientific disciplines or school subjects and to all the processes involved in the acquisition of new knowledge in school teaching. In general, then, it is true that in the school context, without the teacher's intervention, the student cannot construct knowledge; at the same time, the teacher's role as an intermediator of knowledge construction is not in contradiction with the theory of constructivism.

In conclusion, the theory of constructivism implies the importance of the teacher as a transmitter of knowledge. As Young argues in Bringing Knowledge Back In (2008), it is precisely because knowledge is a social construct that knowledge needs to be 'brought back' into teaching, with the consequence that the teacher needs to be reintroduced to the role of a knowledge intermediator, to an agent of knowledge. The teacher has to think carefully about how to guide the student to construct knowledge (see, e.g., Hudson et al., 2023). If we start from constructivist theory, it is, therefore, all the more strange if, in referring to it, the teacher is displaced from his or her teaching role. It encourages a belief in the teacher that s/he should not be an intermediary between knowledge and the student's learning, but since this is necessary and because he or she is in this role, this belief makes him/her feel bad that he/she is doing the wrong thing when he/she is in the teaching role. As a result, the directive to withdraw from the teaching role encourages the teacher to withdraw from his/her own reflection on his/her teaching role.

5. Constructivism, the authority of the teacher and the subject supposed to know

The withdrawal of the teacher from the role of direct teaching also entails the withdrawal of the teacher from the relationship with the student. The withdrawal of the teacher from the relationship with the student may also be the intention of the theory. If theorists of progressive pedagogy started from the assumption that the 'typical teacher' exercises an authoritarian type of authority that they oppose, approaches that withdraw the teacher from the relationship with the student may seem appropriate because, in this case, even if the authoritarian teacher does not change his/her attitude, the student is less likely to be exposed to an undesirable type of relationship with the teacher.

In favour of opposition to the authoritarian discourse, in this type of authority (as opposed to the authoritative one), the authoritarian teacher, even in cases where he or she teaches in a well-argued manner, does not, by his or her very attitude towards the student, leave any room for doubt as to the veracity of the knowledge that he or she is imparting. In the process of teaching and learning, s/he does not deal with ignorance as a constitutive part of knowledge. Knowledge does, in any case, include apodictically given truths. However, when an authoritarian teacher's discourse is used, it is more likely that students will not believe in the truth of the content of knowledge because they are persuaded by the teacher's arguments, which they could also consider for themselves; they will believe in the content of knowledge simply because it was spoken from the position of an authoritarian position of a teacher.

However, the position of authoritarianism, which was dominant in the last century, has changed in modern times and has been replaced by the other extreme of authority, permissiveness. Starting from the framework of permissive authority, the teacher, for example, starts from the false assumption that he/she promotes the student's freedom by merely encouraging his free development. When this assumption is transposed into the field of knowledge, which exists objectively, independently of the student, it means that the truth of objective knowledge, and (because of the teacher's false assumption that the student can arrive at something on her/his own that s/he cannot know in principle) the student's subjective 'truth' are directly opposed to each other. The engaged permissive teacher, although he/she demonstrates his/her belief in knowledge, pursues it with his/her students, but because of his/her own pedagogical phantasm (that he/she has only to support the free or natural development of the student) he/she 'promotes' the student's 'truth', and, therefore, in principle has to make concessions with regard to objective knowledge. Because it devalues objective truth, it consequently undermines the necessity of the validity of the argument, the justification of truth and the value of justified knowledge. It thus turns the discourse of knowledge into a discourse of unfounded quasi-knowledge. Permissive authority, just like authoritarian authority, ejects the moment of ignorance from the discourse of pedagogy, but not by the teacher, on the contrary, by the student. In this pedagogical phantasm, the student 'always already knows'. Even if the student does not demonstrate objective knowledge, the teacher, in order to promote the student's 'truth', sees this fact as irrelevant. Virtually everything the student says, everything the student 'constructs', is labelled and confirmed as knowledge so that the student does not get the message that s/he does not know something.

There is a fallacy in the teacher's avoidance of putting the learner in a position of ignorance that is frustrating for the learner. Some recognition of ignorance may indeed be a temporary frustration for the learner, but it is necessary as an intrinsic driver of knowledge. The fear of the knowledge of ignorance being frustrating for the learner creates an understanding that situations which open up ignorance in the learner should be avoided in the classroom (Krek, 2020; Krek. 2021). Instead of trying to open up ignorance in both oneself and the students, the teacher is constantly engaged in introducing 'active' (the lesson should have as many short stimuli as possible, noises, colours, materials, etc.) to fill the space where ignorance should enter the discourse. The result is an unjustified, 'too quick' belief in the learner's own knowledge and, on the other hand, an unjustified but fundamental disbelief in any knowledge that exists outside of him, in the Other. It creates a general disbelief in knowledge, which in turn fundamentally undermines the student's desire to pursue knowledge.

An even more acute sub-type of permissive authority is the disinterested, neglectful teacher, who in one way or another communicates to the students that the teacher him/herself has no interest in the knowledge he/she is imparting in teaching and learning and in the student's progress in knowledge. The teacher is not a model of subjective belief in the truth and relevance of the content of knowledge and, therefore, not a model of belief in knowledge. Out of his or her comfort zone, the teacher merely starts to follow the materials produced by the publishers, referring to the daily lesson plans, the assessment and testing exercises, the interactive ICT exercises, and similar, which are no longer just necessary textbook materials but are 'attractive' to the teacher because they are supposed to relieve him or her of didactic and professional reflection.
The withdrawal of the teacher from the teaching role goes hand in hand with the greed to produce profit. It is worrying because it puts the teacher him/herself in a position where the professional competences he/she has acquired are no longer of value. The result of this clutch between the pursuit of profit production and the placing of teachers in a comfort zone is the teacher's disinterested teaching, which destroys the student's interest in knowledge rather than creating a belief in knowledge.

In both forms of permissive authority, the teacher is nowadays naturally placed in the position of facilitator for opposite reasons. This is the role of the teacher who, as Šimenc (2021) points out in the context of the debate on the role of technology in education, only 'helps students' and 'makes things easier for them' (p. 22). Drawing on Bax, who introduces the term 'dificultator', the

author points out that the teacher must also be a dificultator: 'if the learning process requires it, he makes things more difficult' (p. 22). The key to 'deep critical thinking' is that 'the learner is able to question even those of her/his own views that s/he takes for granted, which is often difficult, and the teacher's help is essential in this respect, but it can be seen as making the learning process more difficult' (p. 22). The starting point of the learner is a certain knowledge and beliefs (doxa), from which the teacher has to work when teaching. Drawing on the theory of the power of mindset, the author points out that 'good teaching' 'prepares students not to avoid the difficult (difficult tasks, difficult questions) but to take it as a challenge' (p. 22). Thus, we can conclude that any good teaching must shake the student+s doxa, which, because it introduces a moment of ignorance, is an aggravating factor for the student: it puts the student in the position of building on what he or she knows.

Unlike the two permissive types, in the authoritative type of authority (and similarly in the authoritarian type, which also has the undesirable effects pointed out earlier), the teacher is placed in the position of agent of knowledge in relation to the student, and it is this that is necessary for the process of learning to take place in the teaching process. As Plato pointed out with the paradox of Menon, the reason for the necessity of teaching is the ignorance that is at the origin, for which we have to 'first0 assume that the Other knows, to presuppose the meaning and truth in the Other, in order to enter with this presupposition into a relationship with the Other and into the process of acquiring knowledge. Because ignorance is fundamental to the human being's position as a creature of discourse, one must first presuppose the truth in the Other, merely believing in the knowledge of the Other, in order to embark on the path of acquiring knowledge. The acquisition of knowledge, therefore, involves the function of the teacher, who takes the place of 'the subject supposed to know' (Lacan, 1996, pp. 215–222).

In contrast, the flip side of this zero point of knowledge is ignorance, which must be constantly recreated in the very process of transmitting and acquiring knowledge: the discourse of knowledge is speech, which constantly introduces ignorance into discourse and, by opening up the place of ignorance, maintains the field of knowledge, the openness to knowledge. This posterior ignorance does not make all truth relative but refers to the limit inherent in all truth and to the doubt (the possibility of questioning) that this limit makes it necessary to introduce into the discourse of knowledge.

Therefore, teaching according to the authoritative type of authority promotes both belief in knowledge and reflection on knowledge. Because we desire what we do not have, because desire is generated by the absence of the object, this 'opening of ignorance' creates the learner's desire to know and, in general, the desire for knowledge. In the process of the learner's acquisition of knowledge, therefore, the introduction of the moment of ignorance plays an essential role.

The teacher introduces ignorance into the processes of teaching (the transmission of knowledge) by continually introducing knowledge that is new to the students, a novelty that presupposes and reveals ignorance. The novelty of difference is surprising because it introduces the 'other of knowledge', that is, the difference to already acquired knowledge. From the point of view of the (subjective) relationship between teacher and student (and from the point of view of the 'dialectic of teaching'), the teacher, by means of an argument that indeed clarifies and allows understanding, but at the same time (because of the fundamental principle of argumentation that 'argument clarifies') allows doubt, allows questioning and thus allows subsequent ignorance. From the student's point of view, the usual way in which the teacher introduces the moment of ex post facto ignorance (in this relationship) is to place the student directly in the position of ex post facto ignorance: s/he sets him/her tasks to which s/he must (on the basis of his prior knowledge) find the answers for her/himself. (Of course, it must always be borne in mind when teaching at school that the student's independence is relative, depending on his/her age, his/her background, etc.).

We conclude, therefore, that the continued insistence on the 'traditional-modern' dichotomy supports the persistence of the past, is an irrelevant theme in terms of the quest for quality and obscures the real problems of teaching in the contemporary world.

6. Conclusion

The problems of teaching in contemporary times and the issues of didactics that need to be illuminated through the discourse of knowledge are, of course, more than we have been able to highlight and address here.

In the second half of the 20th century, an ideology of teaching emerged in the pedagogical arena that 'modern', 'real' teaching is that in which the teacher withdraws as a link between the content and the learners. This false message, combined with the pedagogical fallacies of progressivism, has led teachers to believe that they are teaching 'right' simply by applying predetermined 'right' forms of teaching, irrespective of the objectives and the context. These are the forms that ideology proclaims to be 'progressive' and those that are supposed to allow the learner to 'construct his/her own knowledge', which is not possible. The wrong starting points inevitably pervert teaching into effects that are contrary to the aims of teaching.

When and how do these unintended consequences occur? For example, when the teacher makes concessions in the transfer of knowledge, when he or she automatically favours discussion over explanation, when he or she ensures that the student is engaged with the materials regardless of their relevance to the learning objective, when he or she does not burden the student with consolidation, when he or she does not put the student in a position of ignorance, by not setting high expectations (because they can frustrate the learner), by using group work at the cost of the learning goal (the means becomes the end), by making concessions to the truth, justification and veracity of knowledge, and, in the ultimate form, by no longer representing the learner's essential point of knowledge holder in his relationship to knowledge.

It is time to face the reality that such teaching is a circulus vitiosus, a closed circle from which it is necessary to break. With the same starting points, constant 'improvements', together with the label of 'new', only exacerbate the problem. The condition for leaving is to abandon the discourse of opposition between 'traditional' and 'modern' teaching and similar value dichotomies. There is no traditional teaching, but the phantasm of traditional teaching is perpetrated, which inevitably produces the opposite phantasm of the modern, the a priori good, which removes the teacher from the teaching role. The slogan of 'withdrawal' establishes the teacher's excuse for the absence of his or her own thinking, professionalism, and responsibility in teaching. The criterion of

teaching can be neither traditional nor modern, whatever that may mean. The very symbolic framework that guides reflection on the teacher's teaching role in the transmission of knowledge needs to be changed. The starting point of the teacher's reflection on teaching must be the learning objectives, and the measure of successful teaching is their achievement.

What we should aim for can also be illustrated by contrast to the selected examples discussed earlier: that the teacher transmits knowledge through the integration of explanation and discussion, that he or she includes the consolidation of knowledge as a necessary back side of explanation and discussion, that he or she puts the learner in a position of ignorance (which can be frustrating) in the classroom as a discourse of knowledge, that he or she sets high expectations for the learner (monitors his or her performance and pushes the boundaries of expectations), to apply the form and method of work according to the learning objective and the attendant circumstances, to use the representations according to its relevance to the learning objective, to transmit knowledge as grounded truth, to represent the point of the knowledge holder for the learner and, as an agent of the discourse of knowledge, to establish in the learner a grounded belief in knowledge.

Are we in a reality in which the learner is not challenged in relation to knowledge by teaching through the disintegration of the discourse of knowledge? Are we not already witnessing the consequences of an individual going from school to life without being stimulated by a grounded belief in knowledge and a desire for knowledge formed at a young age? That they are not 'internally' prepared and committed to knowledge that they find new and even more difficult tasks to be an obstacle rather than a challenge? Does the attitude towards knowledge, which has been established for decades in the educational sphere, shape an individual who is unable to strive for knowledge, for competence, to build on knowledge, to broaden and deepen it in life?

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Chapter 8: Quality assurance policies and practices in Estonian and Kosovan initial teacher education: convergence or different paths?

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Abstract

Quality assurance in higher education and teacher education is a topical issue at both the research and practical levels. The literature emphasises the importance of quality assurance practices and tools, which should define the responsibilities for different levels in the institutions and engagement of stakeholders (students, academic staff, management and support staff, employees, and graduates). The challenge is to design quality assurance policies and practices that reflect all concepts of quality, and the trend is to focus more on quality as a transformation in the teaching and learning process. While there is abundant literature investigating quality assurance in higher education, the implementation of quality assurance policies and practices for improving quality in initial teacher education seems to be still under-researched. This article aims to compare the current quality assurance practices in initial teacher education in one Estonian university and four Kosovo universities. Three research questions were defined: 1) How do quality assurance practices reflect quality concepts? 2) How are QA practices implemented in Kosovo and Estonia? 3) What improvements have the key persons in initial teacher education QA recommended in the Kosovo and Estonian contexts? This is a qualitative study including document analysis and focus groups. The data were gathered from QA regulations considered relevant by the universities and focus group interviews with representatives of initial teacher education institutions from different positions (including administrative and academic staff). Considering their national QA systems have evolved differently in recent decades, Estonian and Kosovan approaches to QA practices are in different phases. Nevertheless, finding appropriate tools to empower academics remains a challenge for both countries. This chapter recommends a better balance between quality assurance and quality enhancement is achieved to develop a quality culture in initial teacher education.

Keywords: Quality assurance, policies, practices, ITE, Estonia, Kosovo

1. Introduction

Since the Bologna declaration in 1991, the stakeholders in the European Higher Education Area have discussed and created several quality policies and practices at national, institutional and subunit levels to improve the quality of teaching and research in higher education institutions. Based on the current literature, Schindler et al. (2015) have stated that more research is needed to better understand the influence of culture on the use and meaning of quality terminology. Specifically, research is needed to determine whether the terms 'quality' and 'quality assurance' are applicable across cultures and, if so, whether there are distinct regional and national meanings of these terms (Schindler et al., 2015). The higher education institution (HEI) as a whole and the quality assurance (QA) system should consider the synergies between the QA tools and ensure collaboration between actors in the institution in order to increase efficiency (Gover & Loukkola, 2018).

At the European Union (2014) level, it has been agreed that initial teacher education could benefit from quality assurance arrangements and regular reviews, with emphasis being placed on achieving the required learning outcomes, on the quality and adequate duration of practical experience and on ensuring the relevance of what is taught. Policies for assuring the quality of teachers cover several stages. The first stage comprises recruitment and selection policies; the second includes accreditation policies and agencies to monitor and ensure the quality of teacher education institutions and programmes; the third spans policies and agencies governing full entry to the profession (Ingvarson & Rowley, 2017). In the following article, we concentrate on the second stage: the QA of institutions and programmes.

2. Theoretical framework

The theoretical framework section is guided by the research objectives of this study and is organised into four main subsections: 1) conceptualisations of quality in higher education focuses on definitions, concepts and notions related to quality in higher education, 2) quality in the European higher education system provides an overview of European-level reforms influencing quality assurance in higher education institutions, 3) stakeholders engagement in quality assurance practises and 4) change in quality assurance processes and institutional quality highlight the potentials of quality assurance practices in promoting institutional improvement and change.

2.1 Conceptualisations of quality in higher education

Quality in higher education is a complex concept to be defined in operational terms (Green, 1994). Tam (2014) argued that quality in higher education has a multidimensional nature of conceptualisation. Quality pervades both the higher education scientific literature and the practical contexts of higher education institutions. However, despite its omnipresence in various contexts (theory and practice), it remains under-theorised (Bendermacher et al., 2017). In the literature, many definitions and views regarding quality in higher education can be found. However, mapping the definitions of quality in higher education shows that the meaning of quality in higher education has remained relatively stable for the previous two decades (Schindler et al., 2015).

For instance, Harvey and Green (1993) have attempted to define quality in higher education in terms of stakeholders' views as follows: quality as exceptional, quality as perfection, quality as fitness for purpose, quality as value for money, and quality as a transformation (1993). The notion quality as exceptional is understood only as something that is special and meets particular standard requirements (e.g., Harvey, 2005, 2007; Harvey & Green, 1993); quality as perfection indicates a situation when the outcome of a certain process unfolded perfectly with zero error, quality as fitness for purpose is evaluated in terms of the likelihood that the offer (product or service) fits the intended aim, stated mission/vision, or predefined standards and requirements (e.g., Harvey & Williams, 2010; Westerheijden, 2007); quality as value for money includes a model where the outcome is of high standards and is provided at a lower cost and can be best explained by the concept of institutions accountability to stakeholders (e.g., Jungblut, Vukasovic, & Stensaker, 2015); quality as transformation captures change in action that transpires with added value for stakeholders involved, for instance, input influences a positive change in student learning (e.g., Harvey & Green 1993; Marshal, 2016).

A study by Schindler et al. (2015) provides a synthesis of the literature on definitions of quality in higher education by identifying four broad clusters (quality as purposeful, exceptional, transformative, and accountable), which are consistent with the original classification of Harvey and Green (1993). Schindler et al. (2015) provide a conceptual model for better defining quality in higher education, which is also applied to understanding quality in teacher education (see Figure 1 for detailed information on the model).

Schindler et al. (2015) argue that definitions of quality should be placed against quality indicators of different categories: programmes and instruction (the relevance of programmes' content and practice of academic staff in developing student labour-market relevant competencies), student performance (student engagement with the programme in developing, for instance: research and inquiry skills), administrative/institutional (institution's mission and vision, quality assurance policy, organisation management, etc.), student support (institutional responsiveness to student support services) – all of which reflect different groups of stakeholders' conceptualisations.

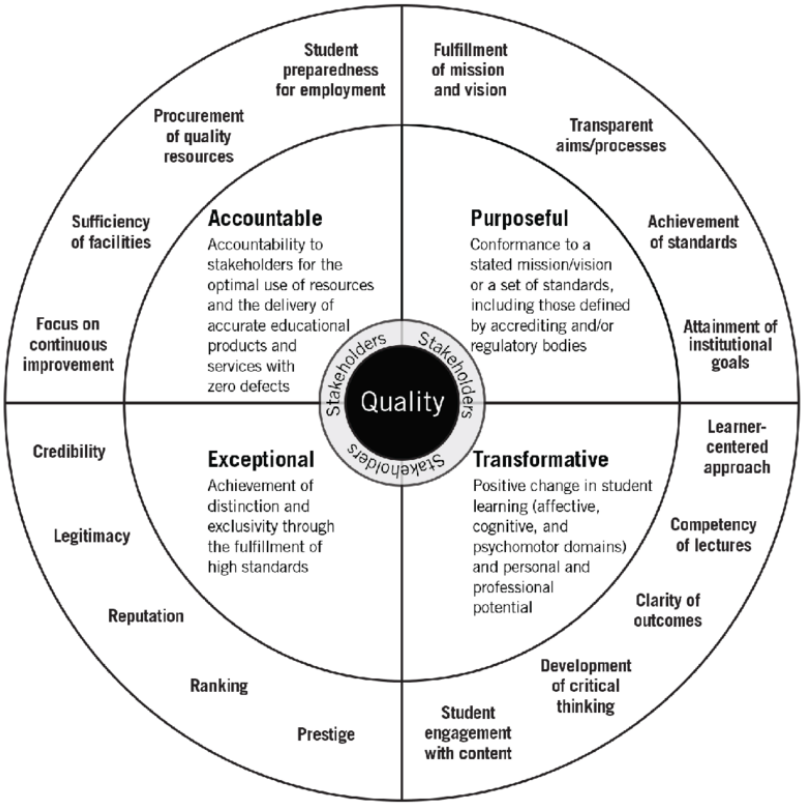

Figure 1. Conceptual Model of Quality Depicting Broad and Specific Strategies for Defining Quality in Higher Education (adapted from Schindler et al., 2015)

There is a trend in many of the newer publications towards stakeholder-driven definitions of quality. This trend is consistent with educational changes in the United Kingdom and the United States over the past two decades in which, to bolster public trust, institutions were compelled to demonstrate quality through evidence of student learning as opposed to relying on accrediting bodies to confirm quality based on adherence to predefined standards (Schindler et al., 2015).

Correspondingly, Green (1994) suggests that the best approach to evaluating quality in higher education is to identify the criteria that different stakeholders, such as the government, labour market, academic staff, management, students, and society at large, consider when assessing quality in education. For instance, in terms of government perception, quality in higher education means that students graduating from internationally recognised and high-standard programmes will inquire about minimum costs. Regarding employers, quality in higher education reflects the development of labour market-relevant student competencies, including marketable knowledge, skills, and attitudes. For academic staff, quality in higher education may indicate student-centred teaching and learning that synthesises research and teaching and combines theory and practice to achieve outcomes. Finally, students may understand quality in higher education in terms of how well it corresponds to their readiness to contribute to society (Bendixen & Jacobsen, 2017).

However, even within the same group of stakeholders, conflicting understandings and perceptions regarding what constitutes quality in higher education can emerge depending on individual and group culture (Newby, 1999). Hence, potential contradictions in their views are apparent.

2.2 Impact of external quality assurance processes

As an important practice in Europe and beyond, higher education institutions and their programmes are required to undergo external quality assurance processes (Enders & Westerheijden, 2014). The common Standards and Guidelines for Quality Assurance (hereafter ESG) were developed at the Bergen meeting in 2005 (Bergen Communiqué, 2005) to 'contribute to a common understanding of quality assurance [...] among all stakeholders' (European Association for Quality Assurance in Higher Education (ENQA), 2015, p. 6). Estonia and Kosovo are also part of the European Higher Education Area's efforts to improve quality in higher education and have been using ESG as a reference document for external quality assurance processes.

The exposure of higher education institutions to external quality assessment processes focused their attention on two main issues: accountability and enhancement (Beerkens, 2015). Williams (2016) argues that at the heart of all quality assurance activities are the twin purposes of achieving quality assurance and enhancement. This trend is older and broader than the ESG implementation. It was also strongly present throughout the scholarly discussions.

The Analytic Quality Glossary by Harvey (2004–2018) defines quality assurance as 'the collections of policies, procedures, systems and practises internal or external to the organisation designed to achieve, maintain and enhance quality'. The Analytic Quality Glossary also defines quality enhancement as 'a process of augmentation or improvement'. It has two strands: first, it is the 'enhancement of individual learners; the augmentation or improvement of learners' attributes, knowledge, ability, skills and potential'. Second, it is 'the improvement in the quality of an institution or programme of study'. When undergoing quality assurance processes, institutions assure society of the quality of their delivery (accountability) along with identifying areas of further developing institutional quality (enhancement). Hence, quality as control and quality as improvement are inseparable components of the central purpose of achieving institutional quality in European higher education institutions (Williams, 2016).

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society of the quality of their delivery (accountability) along with identifying areas of further developing institutional quality (enhancement). Hence, quality as control and quality as improvement are inseparable components of the central purpose of institutional quality (Williams, 2016). Both components can influence the development of a 'quality culture' that is supported by the collective effort of different stakeholders (Harvey & Stensaker, 2008).

However, though accountability and enhancement are the main components and grounds for achieving quality in higher education, their relationship is not simple. Williams (2016) argued that quality assurance and enhancement have sometimes been planned as separate institutional goals, and this can reflect a situation where higher education institutions consider achieving them in isolation from each other. Moreover, quality assurance has been characterised as a top-down (government) approach (Harvey & Stensaker, 2008), while enhancement has been perceived as a bottom-up (institutional) approach (Williams, 2016). In this case, the main differences between the government actors (e.g., accreditation agency representatives) who concentrate on quality assurance and the institutional actors (e.g., academic staff), who focus on improvement tactics, have been noted as the main tensions in the literature (Williams, 2016).

The development of a culture of quality depends on the influence of both components supported by different stakeholders' collective efforts (Harvey & Stensaker, 2008). According to Beerkens (2018), quality assurance activities have prompted a change in European institutions' culture of quality through promoting collegial decision-making. For instance, such discussions among staff occur during the development of a self-study report, a document prepared for the national quality assurance agency. In such circumstances, the preparation of the document indicates structural and technical reforms and engages staff in reflective discussions that can contribute to a change in their attitudes and potential changes in the curriculum (Beerkens, 2018). As a consequence, Harvey (2006) has considered external quality assurance as a 'catalyst' for change. Therefore, as Scott (2012) pointed out, European institutions were prompted to internalise these reforms.

2.3 Stakeholders engaged in quality assurance practises

One of the pillars of the so-called European model of quality assurance is the stakeholder model. It is understood that a QA system that is shared by all stakeholders is better than one that is developed and run by only one stakeholder (Bollaert & Delplace, 2020). A prevalent argument for stakeholder engagement builds on the idea that stakeholders have unique expertise in the sector (Beerkens & Udam, 2017). Within a functioning quality culture, every actor is working towards the same goal, and the QA officers are merely moderating the relevant processes instead of being the only ones feeling obliged to keep them alive (Loukkala, Vettori 2013). The results of an empirical study by Beerkens and Udam (2017) show that stakeholders indeed have somewhat different views about the purpose of quality assurance.

There are four groups of stakeholders that must be considered, according to Schindler et al. (2015), when defining quality, and each group has a different perspective on quality:

- providers - funding bodies and the community, taxpayers);
- users of products - students and graduates
- users of outputs - employers;
- employees of the sector - academics and administrators.

The stakeholders that are most frequently involved in quality assurance activities are students and their unions, teaching staff and other HEI staff, employers and professional bodies, alumni, and national HE authorities (Bollaert & Delplace, 2020). Although engaging students in quality assurance is strongly recommended by various policy papers (Communique, 2003), studies show that students are not fully accepted as partners in the process (Coates, 2005; Gvaramadze, 2011) and engaging students in quality improvement remains formal rather than substantive (Blair & Valdez Noel, 2014; Stalmeijer et al., 2016). There could be quite a difference between the opinions of official representatives of student unions and the individual student. The challenge is to involve both at the right level and for the appropriate tasks (Bollaert & Delplace, 2020).

According to Isaeva et al. (2020), an analysis of students' perceptions of engagement in the quality assurance process revealed that there is room for development in every phase of quality assurance. Going forward, the greatest obstacle appeared to be in the planning phase. According to students, their

involvement in the process of planning and designing the curriculum or courses is rare and unsystematic. The study revealed that more emphasis should be placed on the dialogue between universities and students. The findings demonstrate that there are four consecutive activities that universities should focus on while building up an effective and engaging dialogue. First, attention should be paid to the distribution of information. Timely, trustworthy, and two-way communication with students can serve as an impetus to effectively engage students. Students believe that universities should think of various ways to communicate different types of information to them. They do not feel engaged when they receive email, because it is a one-way form of communication, which limits interaction (Isaeva et al., 2020). While this principle may be understood in theory, it is all too often ignored in daily practice. It seems that the dominating communication model is still simply transmitting information from sender to receiver instead of a two-way process of generating and negotiating meaning (Vettori, Loukkala 2013).

The challenge of engaging world-of-work representatives is not foreign to QA agencies as well as to institutions (Gover & Loukkola, 2018). Alumni are a specific and very useful category of stakeholders. They are a bridge between the study programme or institution and the world of work. When their study experience is quite recent, they can provide input with greater authority on the quality of programmes, learning and assessment and, at the same time, bring in their first experiences from the world of work (Bollaert & Delplace, 2020)
In teacher education, the users of outputs are schools and other educational institutions as employers. It has been recognised at the EU level that dialogue and partnerships between teacher education providers, as well as with representatives of the labour market and the community, can provide useful insights and ideas when designing and delivering teacher education programmes (The Council of European Union 2014). According to Pedaste et al. (2019), the teacher professional standard should have a shared understanding of the expectations for teachers' competences.

Teacher education institutions have a rather difficult task when it comes to quality assurance processes as all should take into account and link to whole education and school specifics. That said, not all countries and contexts have a favourable connection between teacher education institutions and schools. In many cases, there are discrepancies between the teacher education provisions and school demands, which has a direct implication for teachers` quality and their future practice (Furlong et al., 2008).

In developing a strategy, policies and activities for stakeholder involvement, it is important not to forget that the degree of effective involvement may vary per stakeholder as well as per activity (Bollaert & Delplace, 2020). Engagement could broaden an overall view of what a quality assurance system should cover. It might help avoid an inward-looking, process-oriented, technical approach to quality assurance (Beerkens & Udam, 2017).

2.4 Quality assurance and institutional quality change

QA systems consist of external and internal quality assurance processes. External quality assurance includes quality audits, ISO Standards, and peer reviews. Internal quality assurance includes self-evaluations of resources and activities in teaching and learning processes, self-accreditation, educational assessment, and student/staff feedback (Endut et al., 2013). QA can be seen as a policy instrument that can be used by a range of different actors (Harman, 1998).
This section focuses on the role of quality assurance quality processes (both external and internal) and their influence on institutional quality changes. According to Beerkens (2015), external quality assessment is the process by which external operational requirements and norms influence the internal aspects of higher education institutions and their programmes. During this process, the internal components of institutions and programmes are evaluated upon a set of criteria (Stensaker & Leiber, 2015). The reviewed institutions and programmes are expected to alter and conform to external norms and operations. Brennan and Shah (2000) have argued that quality assessment is a way of linking the private micro-world of the institution with the public macro-world of society, economics, cultures and politics.

As previously elaborated by Green (1994), quality is differently conceptualised and measured by different actors. As such, the criteria that external assessment actors consider reflect particular norms and values regarding a 'good quality' institution or programme. In light of this, Barnetson and Cutright (2000) have noted that, while quality criteria might impose objectivity, they are 'conceptual technologies that shape what issues we think about and how we think about those issues by embedding normative assumptions into the selection and structure of those indicators' (p. 277). Correspondingly, when institutions and their programmes undergo an external evaluation to improve quality, they should be able to 'identify the overt and the tacit agendas of external scrutiny, and also the implication of compliance with some form of normative expectation' (Yorke, 2000, p. 22). This indicates that quality assessment not only

influences structural changes but has the power to challenge and possibly change previously held institutional stakeholder values, thus resulting in changes to the institutional culture of quality (e.g., Bendermacher et al., 2017).

Becher and Kogan (1992) theorised changes in higher education institutions when undergoing external quality assurance processes (see Figure 2).

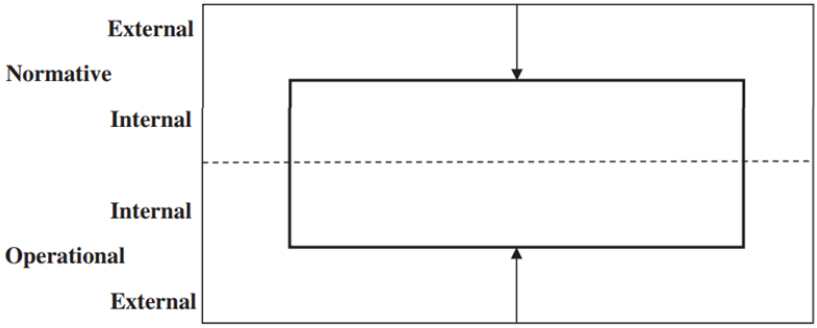

Figure 2. Model of higher education systems and its elements (adapted from Becher & Kogan, 1992)

Their framework conceptualises institutional change resulting from external and internal quality assurance processes influenced by normative and operational modes. The normative mode refers to values, meaning what different stakeholders in the institution deem important, while the operational mode refers to strategies and techniques within the system, meaning what different stakeholders are required to do to achieve quality (Becher & Kogan, 1992). According to this framework, both modes are in continuous interaction.

A standard expectation is that the normative mode dictates the operational mode, such that values that individuals and groups in the institution uphold are carried out through the actions they undertake (Liu, 2016). In practice, this means that the proper implementation of external quality assurance processes is challenged by individuals' and groups' values to implement those quality practices. However, Becher and Kogan (1992) have not completely ignored the possibility of situations when the operations of institutions influence norms. Furthermore, both the normative and operational modes have an internal and an external facet. The internal operations and norms represent and are directly related to the purpose and other internal, related aspects of higher education institutions, while the external operations and norms represent aspects that are imposed on institutions from outside. The external framework affects the inner

normative and operational modes over various approaches.
Argyris's (1999) single- and double-loop learning theory describes the pressure among normative and operational modes (values and actions) and prospective outcomes (see Table 1).

Table 1. The possible outcomes of external quality assessment (adapted from Argyris, 1999)

Operational mode	**Normative mode**	
	Change	Continuity
Change	Double-loop learning	Single-loop learning
Continuity	Accept the norms but change the operations	Neither operations nor norms change

Single-loop learning is one possible outcome achieved with incurred tensions when institutions employ a change in structures and techniques or implement new actions while not changing their existing values and norms (the governing variables). Double-loop learning is achieved when a change in structures and techniques is followed by a change in the 'governing variables' (Argyris, 1999, p. 61). There are two other possibilities of institutions' change (with incurred tensions), namely when institutions accept the norms but do not change the operations and when institutions neither experience operational adjustment nor normative shift, in which case no change occurs.

According to these frameworks, provided that both normative and operational modes are in line, the entire system can maintain equilibrium when institutions undergo internal and external quality assurance processes in efforts to achieve a culture of quality: specifically, if not a perfect equilibrium between both modes and levels, then at best a sense of balance. However, Liu (2016) has suggested various situations when the two modes reach an asynchronous state, which means that there is a lack of equilibrium between quality assurance practices (influenced at external and internal levels) and institution and stakeholder operations and norms to achieve quality improvement. In such circumstances, alternative tuning and action-oriented approaches of the systems and institutions are needed to enable the proper functioning of quality assurance policies and

practices towards quality improvement (Liu, 2016). In essence, the institutional change in light of improving quality will transpire after the needed adjustments following the new equilibrium take place.

3. Research context

In some regions, the terms 'quality assurance' and 'accreditation' are used synonymously, while elsewhere the terms are distinct (OECD, 2005). The diversity of QA approaches across Europe reflected in and accommodated by the ESG is visible in both external and internal QA processes and has a clear impact on the implementation of the ESG, which were deliberately developed to be generic rather than detailed (Gover, Loukkola, 2018). Beerkens (2015) has noted the importance of comparative studies on QA in HEIs to understand why and how the effects and impact of QA are achieved in varied contexts. External QA regimes regulate the design of internal QA to varying degrees. The shift in the external QA approach has direct consequences for institutions' internal QA systems. (Gover & Loukkola, 2018). Meanwhile, the question of specific quality criteria for disciplines or professions has arisen. There are several cases of QA assurance or assessment frameworks in a specific field (e.g., business administration, police and police inspectorate, etc). Therefore, the quality of the initial teacher education (ITE) and the functioning of internal QA policies and practices are discussed in ITEs.

3.1. Estonian context

3.1.1 Overview of quality assurance in higher education system

In Estonia, the legal framework for quality assurance in higher education is regulated by the Higher Education Act (Riigikogu, 2019), which describes the organisation of two measures for higher education quality assessment. Higher education quality assessments are organised and carried out by the Estonian Quality Agency for Education (HAKA) in accordance with international principles. The first measure is institutional accreditation, which is an external evaluation assessing the conformity of the institution's management, work procedure, study and research activities and study and research environment to legislation and the goals and development plan of the institution. Secondly, the quality assessment of a study programme group is an external evaluation assessing the conformity of study programmes and the studies and developmental activities based on those programmes to legislation, state and international standards and

developmental directions with the purpose of providing recommendations to improve the quality of studies (Estonian Quality Agency, 2022.). In addition, the thematic reviews are also foreseen in the Higher Education Act (Riigikogu, 2019).

HAKA is the leading competence centre in Estonia in the field of quality assessment of educational institutions, which officially belongs to the structure of the Education and Youth Authority of Estonia, but it performs independent tasks and is independent in the quality assessment decisions. It was established as a Quality Agency for Higher Education in 2009, but its functions have been widened to vocational, continuing education, and, most recently, also to general education. HAKA's main function is the development and establishment of the principles of quality assessment in the field of education, the improvement of the quality in education, and the valuing and dissemination of the best quality assurance practices in cooperation with educational institutions and other partners (Estonian Quality Agency 2022).

The core values of HAKA are:

- Impartiality: adherence to the principle of equal treatment throughout all activities.
- Competence: qualified assessment experts; possession of state-of-the-art know-how in our activities; continuous self-improvement.
- Cooperation: involving partners and taking their needs into account in a balanced way in order to achieve the best results; application of shared values in teamwork; collaborative learning and teaching at the international level.
- Openness: clarity and comprehensibility of assessment procedures, dissemination of assessment results, flexible response to changes in the environment (Estonian Quality Agency 2022).

HAKA has been a full member of the European Association for Quality Assurance in Higher Education (ENQA) and European Quality Assurance Register for Higher Education (EQAR) and passed the evaluation of the compliance with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) successfully in 2013 and 2018.

3.1.2 Quality assurance in initial teacher education

Since 2001/2002, the initial teacher education in Estonia has been following the principles of the 3+2 Bologna system, which means that the students acquire subject-specific knowledge at the bachelor's level, and they acquire pedagogical and didactic knowledge and skills at the master's level. The competences of teachers are determined by the Teacher Professional Standard, which emphasises teachers' awareness of students' development, facilitation of learners' individual needs, design of the learning environment, support for the learning motivation, assessment for learning, care for physical, mental and emotional well-being (Kutsekoda, 2019; Georg & Poom-Valickis, 2020).

As a result of re-arrangements in Estonian higher education, teacher education is the responsibility of two Estonian universities: the University of Tartu and Tallinn University (TLU). Tallinn University is the largest university of humanities in Tallinn and the third biggest public university in Estonia. Considering the historical role of Tallinn University as a centre of teacher education since 1919, the university sees its responsibility as a leader of Estonian educational innovation, developing theoretical foundations, as well as implementing and mediating contemporary ways of learning and teaching. In TLU, the initial teacher education is organised in cooperation with academic units; the School of Educational Sciences is responsible for the module in educational sciences and psychology; the other schools are leading the subject and subject-didactic modules, and the pedagogical practice periods are integrating pedagogical and didactic aspects (Georg, Poom-Valickis 2020).

The structure of these study programmes is aligned with the National Framework for Teacher Education (2019) and the Teacher Occupational Qualification Standard (Estonian Qualification Authority, 2022). Teacher professional standards have been the basis for all teacher education bachelor's and master's-level curricula in universities since 2013 (Pedaste et al., 2019). According to the decision of the Quality Assessment Council for Higher Education, the teacher education programmes in TLU were recognised for their student-centred approach and the integration of theoretical knowledge of pedagogics and subject to practical skills implemented in the classroom. The graduates of the master's programme will be issued a master's diploma with a diploma supplement, as well as the Certificate of the Teacher (Tallinn University 2022).

The biggest challenge to Estonian education is the shortage of teachers. Compared to OECD states, Estonia is characterised as having one of the highest average ages of teachers. Especially in STEM subjects, there is an urgent need to replace the retiring teachers, but at the same time, the universities are facing the low popularity of teacher education programmes among high-school graduates (OECD, 2019). As a consequence, there has recently been an amendment to the teacher qualification requirements to open the teaching profession to those without a master's degree in teacher education. This has fostered the universities to accept more flexible ways of teacher education; therefore, the importance of teacher in-service teacher professional development has been raised, and the quality of continuing education programmes is a rising issue. At the same time, Pedaste et al. (2019) have shown that teaching professional standards impact degree programmes in the university but not on the continuing education and evaluation of professional competences. Studies in teacher education focusing on defining the improvements for quality enhancement are mainly driven by the idea of students or teacher educators defining the quality gaps in their knowledge, skills, or attitudes. Therefore, there have been no prominent studies about quality assurance in teacher education.

3.2. Kosovo context

3.2.1 Overview of quality assurance in higher education system

Quality assurance in the higher education system in Kosovo is supported by the Standards and Guidelines for Quality Assurance in the EHEA (ESG) (Kacaniku, 2020). The Law on Higher Education is the guiding policy for higher education development, including quality assurance as an important dimension. The term used in the law to refer to quality in higher education is 'accreditation' (Official Gazette of the Republic of Kosovo, 2011), meaning that quality assurance in the context of Kosovo is regularly associated with the accreditation process. The law recognises the establishment and functioning of an accreditation body (Kosovo Accreditation Agency KAA) that oversees the quality assurance of Kosovo's higher education institutions.

KAA is a public agency established by the Ministry of Education in 2008. In accordance with the Law on Higher Education, KAA is an independent institution responsible for internal and external quality assurance, including accreditation, re-accreditation, monitoring, validation and all other quality assurance processes in higher education institutions and their study programmes

in the Republic of Kosovo, in accordance with international best practices, including in particular the relevant European standards in the field of quality assurance in higher education (Kacaniku, 2018). The goals of the KAA are: 1) to promote, improve and enhance the quality of higher education, 2) to increase transparency and accountability in the higher education system, 3) to improve the quality of studies in higher education institutions, 4) to encourage innovative content in higher education, 5) to ensure the comparability of qualifications from Kosovo higher education institutions with those provided by international programmes, and 5) to implement the objectives for the integration of Kosovo in the European Higher Education Area and contribute to its development (Kacaniku, 2018).

The values that support the work of KAA are:

- Independence – The KAA decisions are taken independently and reasonably in a consistent and verifiable manner;
- Transparency – The KAA is guided by the principles of public responsibility and accountability through an effective information policy;
- Credibility – The KAA organises credible external quality assurance processes, where the academic community and society at large trust in the work of the KAA;
- Professionalism – The KAA applies high professional standards applied in Europe in external quality assurance processes.

The accreditation of higher education institutions and their programmes is a periodic activity of KAA, which undertakes institutional and programme accreditation as a formal and transparent quality control procedure, during which it certifies based on defined, internationally recognised standards, whether higher education institutions or study programmes meet the minimum quality requirements (Kacaniku, 2018; 2020). Through accreditation procedures, KAA decides on the status and recognition of institutions and study programmes for a certain period of time. Accreditation in the field of higher education in Kosovo is aimed to provide the society and all stakeholders involved with assurance that the quality of teaching and study meets the minimum international standards. At the same time, accreditation is undertaken to increase the level of transparency in the increasingly unclear market of national and international education offerings (Kacaniku, 2020). In 2022, KAA was recognised by the European Commission for its commitment and success in implementing the recommendations for returning to ENQA and the EQAR (KAA 2022).

According to KAA, the main functions of accreditation processes in Kosovo are:

- Protection of students from offers that are not proven to lead to the achievement of the expected results (employment, international recognition of the degree obtained, etc.);
- Transparency, comparability and, through this, more opportunities in the education and labour market both at home and abroad;
- Facilitate international mobility through mutual recognition of studies and improve graduate opportunities in the European labour market;
- Creating a basis for fair competition between educational institutions for students, respectively, for public or private funds.

3.2.2 Quality assurance in initial teacher education

Initial teacher education in Kosovo advanced to a university-level degree in 2002. Until that time, initial teacher education was the responsibility of higher pedagogical schools as vocational schools located in five major cities throughout Kosovo. Before the 'universification' of teacher education (Kaçaniku et al., 2019), teacher education institutions operated under the umbrella of the University of Prishtina, which was the largest university in Kosovo. The University of Prishtina remains the largest and leading university in the country, with the highest numbers of staff and students, while offering a number of diverse and unique programmes in the country.

Other institutions have gradually developed into independent institutions operating under local Universities and become rather autonomous teacher education institutions (Saqipi & Hoti, 2019). As of 2013, there are five teacher education institutions in Kosovo, with the Faculty of Education in Prishtina remaining the largest and leading institution in the country (Saqipi, 2019). All ITE institutions operate under Law no.04/l-037 on higher education in the Republic of Kosovo and exercise their autonomy of internal operations protected by the law and its sub-legal acts (Kaçaniku, 2020). Nevertheless, institutions are obliged to undergo institutional and programme accreditations periodically as a practice that assures the external quality of institutions (Kaçaniku, 2022).

The teacher development strategic framework defines the standards of the teaching profession, which serve as a reference for initial teacher education and continuous professional development. Teachers' professional standards are

organised into four teaching areas and correspond to the following standards for teachers: 1) professional values, attitudes, and behaviour; 2) professional knowledge and understanding; 3) skills and professional practice; and 4) professional learning and engagement.

Since Kosovo is aiming to join European structures, discussions about teacher quality and raising teacher professionalism have become more relevant, triggering major reforms within teacher education (Kaçaniku et al., 2019; Saqipi, 2019). Programme reforms have followed Bologna Process objectives in order to ensure compatibility and comparability of degree structures by introducing ECTS and the three-cycle system as well as undergoing programme accreditation as a quality assurance practice (Kaçaniku, 2017). Specific initiatives have aimed at improving the quality of teacher education programmes. In 2010, the Faculty of Education of the University of Prishtina developed the first two master-level programmes, which promoted the use of research to improve practice in developing education practitioners. In 2014, supported by an EU-funded project, the Faculty of Education established 12 new master-level programmes to develop the professionalism of subject teachers. In the same year, the EU granted the institution a capacity-building project award to modernise teacher education (Saqipi, 2019). Within the scope of the project 'Towards a quality-oriented system of initial teacher education to increase teacher professionalism in Kosovo' (QATEK), in 2021, four out of five teacher education institutions in Kosovo approved their policy paper on quality assurance aiming to provide a framework and implementation guidelines for initial teacher education institutions in Kosovo introducing an internal quality assurance system for initial teacher education. These policy papers provide a framework that establishes the reference points for standards of programming in initial teacher education, as well as outlines the processes and instruments that lead to identifying improvement areas, thus enabling the institutional actions to enhance the existing practices.

4. Methodology

Our study is qualitative, using an interpretive and inductive approach (Cohen et al., 2018). Qualitative research enables researchers to immerse themselves in naturally occurring social phenomena by following 'an interpretive approach to the world' (Denzin & Lincoln, 2018, p. 5). It allows participants' opinions to be flexibly represented and prompts issues that emerge beyond participants' actions and behaviours that exist underneath their consciousness (Creswell & Creswell, 2018). As discussed in the theoretical framework, quality in HEIs is a

complex concept, which may, in practice, underlie varied values and meanings as well as strategies and techniques. Therefore, the interpretive approach in our study was chosen.

4.1 Data collection and analysis

Data was collected from several data sources: documents and focus group interviews. The data presents the QA concepts, practices, and improvements from one large urban university in Estonia (code E1), one large urban university in Kosovo (code K1) and three small urban universities in Kosovo (codes K2–K4). All participating institutions were partners in the QATEK project co-funded by the Erasmus+ Program. The research question about quality concepts used in QA practices will combine data from documents and interviews. Research Question No 2 about existing QA practices in Kosovo and Estonian contexts will be answered based on the data from documents. Finally, the research question about improvements recommended by the ITE QA key persons in Kosovo and Estonian contexts was explored with the group interviews (see Table 3).

Table 3. Data sources

Data sources	E1	K1	K2	K3	K4
RQ 1–2: Documents	3	5	5	3	6
RQ 2–3: Interviews	4	2	2	2	2
Participants of interviews in total	22	7	7	8	6
Academic staff participating in the interviews in total	17	7	5	5	3
Non-academic staff participating in the interview	5		2	3	3

The documents are defined in research as texts that exist before the research starts, and they may reside in either public, private, or virtual domains (Tight, 2019). The documents used as data sources were regulations and questionnaires (Annex 1), which the representatives of the universities considered relevant to forward to the authors. We used the English versions of the documents.

Documents are considered to be stable, rich, and rewarding sources that are non-reactive but still contextual (Tight, 2019).

Using more than one source of data is suggested to add value to the research (Tight, 2019). Therefore, we planned group interviews to triangulate the main outcomes of the documentary analysis. The group interviews were conducted with the representatives of 4 Kosovo universities during the period March until October 2020, when 2 rounds of interviews were organised. The first round of interviews took place during the physical workshop in the kick-off seminar of the QATEK project. The second round of interviews was held as online meetings using the Zoom platform during the COVID-19 pandemic. Group interviews with the representatives of Estonian universities were held during the development planning process in February 2022. None of the interviews was recorded or transcribed verbatim; instead, we used note-taking techniques by the authors. According to Rosaline (2008), systematically produced notes can be an acceptable alternative to transcripts.

The data were analysed by using an interpretive approach and implementing a thematic analysis (Tight, 2019). The study used a hybrid approach of thematic analysis (Fereday & Muir-Cochrane, 2006) by combining a deductive template for data analysis (Crabtree & Miller, 1999) for Research Question 3 and data-driven inductive approaches (Boyatzis, 1998) for Research Questions 1 and 2. The analysis was conducted by two international experts (Tallinn University, Estonia), who worked with data in several phases, starting from initial reading and discovering themes and subthemes in the documents to building hierarchies of themes and linking them into a theoretical model. The framework for analysis was based on concepts of quality, according to Schindler et al. (2015) (Figure 1). The focus of the thematic analysis was on identifying and describing implicit and explicit ideas within the data.

5. Findings

The findings are presented in the three sections based on the research questions. In the first section, we will describe how the concepts of quality were presented in the QA documents. In the second section, we give an overview of the existing QA practices in the ITEs of Estonia and Kosovo. In the final section, the recommendations for the improvements by the ITE QA key persons are presented. The citations from documents illustrate the key ideas identified in them.

5.1 Quality Concepts in QA practices

We found that the most prominent way to conceptualise quality with QA practices was Quality as Accountability and Quality as Purpose in Estonian and Kosovo ITEs.

The concept of Quality as Purpose was defined in terms of the QA policies and practices in both contexts. Kosovo ITEs have identified it as one aim of the QA system. 'Evaluation activities arc realised for identifying elements that require intervention for improving the existing situation.' (K4). Quality as Purpose was primarily evident in E1 as a criterion for an internal evaluation that the study programme administrator should follow in analysing the functioning of the study programme. 'The study programme administrator analyses the study programme at least once every three years based on the following criteria: compliance of the content of the study programme to the objectives and learning outcomes'. The confirmation of external accreditation standards could be recognised as the aim of the QA regulations at Kosovo ITEs.
'Through the assessment of the study programme, it must be determined whether it meets the accepted standards of the European Association for Quality Assurance (ENQA) and whether it corresponds with international practice. It should be evaluated as to whether the structure of the study programme enables the integration of students and graduated professionals in the educational systems of other countries of the European Higher Education Area.' (K3).

In Estonia, the typical quality assurance practice representing the concept of Quality as Accountability was also the institutional accreditation and thematic quality assessment organised by the Estonian Quality Agency. It is a notable difference that while the Estonian ITE refers to accountability to national criteria, the Kosovo ITE points out meeting the standards at the EU level. Presumably, this refers to the level of trust that is present for the universities concerning the national accreditation system and its acceptance at the EU level.
Quality as Accountability for stakeholders is explicit in the aims of QA policies and practices in both countries. In Estonian universities, the 'Procedure for the Feedback in Degree' studies refers to accountability aspects in the objectives of different feedback tools, for example, feedback collected from student candidates, students, international exchange students, as well as from employers and cooperation partners. 'Employers and cooperation partners are asked for feedback with the aim of obtaining input for study programme development based on the needs and expectations of the society [...]'.

It is similar for QA tools, like student course evaluation, implemented in Kosovo ITEs. 'It is important to note, once again, that the purpose of this evaluation is to improve the quality of studies in general, including the work of teachers – teaching.' (K1). By explaining the purpose of QA tools, the ITEs are presenting the importance of the feedback for the improvement of the institution; this is an attempt to motivate the stakeholders to fill in the surveys.

The remarkable difference between the quality concepts implemented in ITEs was the presence of Quality as Transformation only in Estonia. The change in student learning was addressed in the Student Course Evaluation as one of the aims. 'Students are asked for feedback with the aim of directing the students to analyse their learning'. The questionnaire also has a section that directs students to analyse themselves in the learning environment.

In our study of Estonian and Kosovan QA systems, the most rarely used concept of quality was Quality as Exceptional. Similar results have been shown at the European level (Gover & Loukkola, 2018), and it has been noted that the concept of excellence has been recognised as being far more prevalent when it comes to research rather than teaching and learning, which are often considered to be dependent on the personal characteristics of the teacher and the student, as well as the tradition of teaching being closely linked to the academic freedom of the teacher.

5.2 Existing QA practices

The findings of our study reveal a great variety of existing QA practices in Estonian and Kosovo ITEs. The Estonian and Kosovo approaches to regulating QA practices differ in the levels of detail prescribed. In the Estonian context, predefined objectives and positions are responsible for implementing the QA practice, but the responsible persons have the autonomy to decide about the method and exact questions on how to collect feedback from stakeholders. QA is more visible in Kosovo since the term 'quality' appears in the headings of legal acts and in the titles of positions.

Table 2. Organisational structures that integrate QA practices

QA practises	E1	K1	K2-K4
QA regulation	Legal act defines procedure, which regulates the collection, analysis, and publication of feedback to improve the degree studies at university level	Legal act that defines the standards, procedures, and methods of quality assurance at university level	
QA office	NA	An administrative unit within the university responsible for the implementation of quality assurance measures	
QA Committee	NA	An official university body responsible for monitoring and collecting data on quality.	An official university body responsible for monitoring and collecting data on quality. It is comprised of faculty members who represent faculty views on quality assurance issues[4]
QA responsibilities in units	QA-related tasks are distributed to several positions	Vice Principal for Research, Quality and Development	QA committee in faculty[5]
Integration of QA-related tasks	QA-related tasks are distributed to several positions and committees	NA	NA

[4]It is the case in one of small urban university K3

[5]It is the case in one of small urban university K4

Some QA practices aim to involve the stakeholders' perspectives on quality assurance by gathering the opinions of students, administrators, partners, and employers (Table 3). In Kosovo universities, there are QA packages that include questionnaires for stakeholders. In Estonia, the responsibility is determined without prescribing the methods or content of the surveys.

Table 3. Integrating stakeholder perspectives into QA practices

QA practices	E1	K1	K2-K4
Feedback from students	University-wide feedback surveys are conducted in the Study Information System	Student Course Evaluation	Student Course Evaluation
Feedback from administrative staff	Staff satisfaction survey is conducted every year by the central office.	Questionnaire for administrative staff	Questionnaire for administrative staff[6]
Feedback from partners and employers	The person responsible for collecting feedback from employers and cooperation partners is the study programme administrator, who collects feedback at least once every three years in any chosen form.	NA	Questionnaire for businesses[7]

[6]It is the case in one of small urban university K2

[7]It is the case in one of small urban university K2

Feedback from alumni	The university participates in the national survey conducted among alumni of higher education institutions every 3 years. Additional surveys will be planned on the university, unit, or programme level based on their needs.	NA	Questionnaire for alumni[8]
Feedback from international exchange students	The survey is conducted in Study Information System by the central office	NA	NA
Feedback from student candidates	Survey conducted by the central office	NA	NA

[8]It is the case in one of small urban university K2

Additionally, QA practices establish a framework for regular programme monitoring and self-evaluation, whether internally or externally (Table 4). There are also examples of evaluation processes which focus on academic staff and student services.

Table 4. QA practices for evaluation of programmes, academic staff, and student services.

QA practices	E1	K1	K2-K4
Internal programme review	An internal assessment is a systematic and regular analysis of the study activity. As a result, the strengths and development needs of the study activity are presented, and continuous development activity is planned	NA	Regular monitoring of efficiency of studies in the study programme (also called 'regular quality assessment')
External accreditation	Institutional accreditation and thematic quality assessment of the university.	Programme accreditation every 5 years	
Evaluation of academic staff	By evaluating employee performance and conformity with the requirements, the evaluation committee supports the employee's development and career opportunities. It occurs at regular intervals (every 5 years) and covers research, teaching and administrative tasks.	NA	collecting feedback from students and data about research. Reporting about it to the relevant bodies in the institution (e.g., education-scientific council)

		NA	Evaluation of professors based on their self-evaluation - annual written report from teachers about all aspects of teaching process[9]
Evaluation of student service	University central level procedure, which regulates the collection, analysis and publication of feedback to improve the degree studies	Student Questionnaire about resources - survey to collect data about students' evaluation of the quality of textbooks, literature, library, IT, laboratories	NA

[9]It is the case in two of small urban universities K2 and K4

5.3 Improvements recommended by the ITE QA key persons

Based on the main results from the focus group interviews, it can be summarised that there are several areas for improvement.

In both contexts, the data about students in teacher education was recommended to be improved, but the content of the data focussed on different aspects of the teaching and learning process. In the group interviews of Kosovo key persons, the need to create a habit amongst students to give feedback about the study process was identified. The aim is that students' feedback would be more informative and less formal. It gives a better opportunity to use the information from the feedback in decision-making for areas of improvement. The summarised output of student feedback would be useful for academic units for their quality activities. It was recognised that not all the units receive the full feedback collected from the students. At the same time, the Estonian teacher educators were not discussing the data from student course evaluation but rather the extra data that could characterise the students coping and well-being during the studies.

The closer connection with the stakeholders outside the universities had a similar importance to the key persons of ITE QA in Kosovo and Estonia. The Kosovo TE institutions are aware of the obligation to collect feedback from the labour market representatives as part of the accreditation process; nevertheless, the content and methods for QA from employers' perspective could be improved. For the Kosovo ITE QA persons, the QA practice is expected to be more backward-looking. For example, cooperation with schools and municipalities could indicate the needs and expectations for the programme development, and the students completing their pedagogical practice in schools could also be integrated into QA processes.

For Estonian ITE key persons, the main interest was to get forward-looking input for the organisation of studies in a flexible way. As the educational background and working conditions in schools are more varied, the ITE sees this information as crucial for planning the next improvements.

Considering the quality of academic staff, a similar concern about the research capabilities was proposed for both contexts. In Estonia, it is necessary to strengthen the didactical research by improving the research skills in social sciences of the existing staff as well as investing in the outcomes of teacher

educators in university. In Kosovo ITEs, contradictory opinions exist about whether the amount and workload of QA processes are relevant or whether additional QA processes are needed among key persons. The participants proposed having peer-to-peer evaluation or the performance appraisal process for academic staff to foster their self-development and excellent research activities. The lack of professional administrative staff in Kosovo ITEs who could develop these policies and practices was mentioned as a shortcoming of the current situation.

In the group discussions of Kosovo ITEs, the limited action implemented as the concluding agreement from different discussions held in the QA processes was identified. It was considered that sharing best practices and better collaboration between academic staff could support quality culture in the ITE institutions. More focus should be paid to peer-to-peer coaching and learning among academic staff for improving the teaching and learning of students. In Estonia, the key persons acknowledged the initiatives to form internal groups of teacher educators to share practices and learn collaboratively. However, several inhibiting factors were defined as obstacles to continuous improvement. The most mentioned obstacle for Estonian teacher educators was the time, heavy workload, and fragmented job tasks. Therefore, the improvement in the workload calculation and performance appraisal system are welcomed.

In general, for the improvement of the quality culture, making quality assurance more qualitative and less quantitative in nature, a more substantive engagement of academic staff in planning and implementing the change could help. To sustain such an approach, putting more emphasis on capacity building is needed, and collaboration with international partners would be beneficial.

6. Implications and future research

The findings of the study demonstrated the diverse conceptualisation of the quality of ITEs in Kosovan and Estonian contexts. The quality concepts varied internally in the institutions, where it was evident how different QA policies and practices were formed based on different concepts. Quality as Purposeful and Quality as Accountability were the main concepts of quality present in both contexts. The main difference in quality concepts was the emergence of a transformational conceptualisation of quality in Estonia. As previously studied by Kaçaniku (2020), the changes (within institutions and programmes) are only achieved at the formal level, resulting in changes in the content of institutional

policy documents and study programmes. The study results showed that quality in higher education in the context of Kosovo is understood only through the lenses of accreditation processes, and it is interpreted as a misconception that ensuring quality in higher education means achieving formal provisions of the accreditation process (i.e., the emphasis on meeting minimum and formal criteria), while not encouraging further quality improvement. Our study raises the question for further research about the impact of external QA systems on internal QA systems. Gover and Loukkola (2018) stated that the self-confidence of an institution is often linked to the maturity of the internal QA system, as those with more experience grow more confident about their own capacity to manage and design their QA systems and have a deeper evidence base to draw on. This is also, in turn, often linked to external QA being at the institutional level, which is only possible if there is sufficient societal trust towards institutions (Gover & Loukkola, 2018).

Based on the comparison of QA policies and practices, the differences in trajectories that the studied ITEs have taken are evident. In Kosovo, quality assurance offices are established at the institutional level, and quality assurance coordinators are appointed at the university and faculty levels. The role of this office is to coordinate the institutional and programme accreditation process, namely focusing on staff coordination to actively participate in the development of self-evaluation reports. At the same time, ITE in Estonia has primarily centrally the objectives for the QA policies and practices, and the decisions on how to implement specific QA processes are delegated to units and their leaders, who are responsible for selecting the most appropriate tools and procedures. Leadership and communication have been identified as being key factors for the development of quality culture (Bendermacher et al., 2016). Both trajectories may entail several risks for the quality culture. Kaçaniku (2017; 2020) has noted that the QA office may lack the needed human resources to more effectively undertake all tasks related to quality assurance, but it is aligned with the international trend described by Beerkens as a professionalisation of the QA officers in external evaluation bodies as well in HEIs. In contrast, the lack of clear procedures and policies can be an inhibiting structural/managerial element (Bendermacher et al., 2017). Undeniably, these different QA- systems have the potential to learn from each other but remain aware that inappropriately copying solutions from one system to another may not have a positive impact (Beerkens, 2015).

Kosovo remains at a relatively early stage in its development to provide quality in initial teacher education (Kaçaniku, 2022). European initiatives are implemented formally as changes to legislation and policy (Saqipi, 2019) and programmes' structures and content (Kaçaniku et al., 2019). A major problem characterising the ongoing reforms is that initial teacher education institutions have not examined in depth the education system and contextual dynamics regarding choices for undertaking such reforms. Consequently, the process of improving quality in initial teacher education has a long way to go.

The central issue in QA-related policy development and research is the impact on student learning. According to Beerkens (2015), measuring the true effect of a QA on student achievement is nearly impossible or at least highly resource-intensive. However, a more effective and practical approach is to design QA policies and practices based on empirical evidence. In the Estonian context, our findings show that the student course evaluation represents the concept Quality as Transformation. The emphasis on student engagement and learning is also defined as a future direction for the improvements in the QA of ITE in Estonia. The QA policies and practices studied in this chapter characterise only structural/managerial elements of the quality culture in the HEIs (Bendermacher et al., 2017). Considering that their national QA systems have evolved differently during the past decades, Estonian and Kosovan approaches to QA practices are in different phases. Nevertheless, finding appropriate tools to empower academics remains a challenge for both countries. This chapter recommends a better balance between quality assurance and quality enhancement is achieved to develop a quality culture in initial teacher education. Therefore, future research should also take into account the cultural/psychological elements of the quality culture and study the QA policies and practices in combination with the unique organisational culture.

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Appendix 1. List of documents used as data source

University	Documents
E1	Statute of Study Programme Procedure for Feedback in Degree Studies Employment Relations Rules
K1	Quality Assurance Regulation Survey for Admin and Support Staff Course evaluation QUESTIONNAIRE FOR BACHELOR DEGREE STUDENTS Questionnaire for Academic Staff
K2	Regulation of the Quality Assurance and Evaluation at the University Regulation of the Quality Assurance and Evaluation at the Faculty Package of Quality Measurement Instruments Key Performance Indicators
K3	Standards on Internal Quality Assurance Regulation on the Code of Ethics Regulation on Procedures for Quality Assurance
K4	Self-assessment form for Professors and assistants Regulation on Quality Assurance and Evaluation Questionnaire for the administrative and support staff Questionnaire for employer Questionnaire for BA degree students Questionnaire for academic Staff

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