SELF-EVALUATION OF FUTURE TEACHER PROFESSIONAL COMPETENCES: A CASE STUDY IN LATVIA

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ABSTRACT

Teacher education is the focus of many organisations as an influential tool for improving the quality of our lives, including sustainable development (UNESCO 2022, OECD 2016). Similar to other educational fields, teacher education is increasingly being viewed through the lens of competences rather than just subject knowledge and skills. In Latvia a new competency-based curriculum has been introduced at all levels of education (Skola2030). Therefore, it is important to review the competences required for teachers and developed in higher education to potentially improve the quality of education for their future students and provide experiences in developing competences with which students will have to work in schools as well. In this research we use a self-evaluation instrument developed through the project "Development and Implementation of the Education Quality Monitoring System" (2nd round) for measuring future teachers' professional competences. The results show that overall, future educators self-evaluate their competences highly in all sub-competence areas. Higher self-evaluations are seen in the area of professional development, while lower self-evaluations are seen in the area of planning learning.

Keywords: teacher education, professional competences, self-assessment, higher education, measuring competences.

Introduction

The main goal of higher professional education in the 21st Century is to prepare qualified, competitive specialists for the labour market who are able to work effectively in their field at a world standard level, ready for social and professional mobility, continuous professional growth and possessing appropriate professional competences (Kaļķe et al., 2022). Professional competence is developable, variable, dependent on the context, on an individual's habits of mind, attention, critical thinking, and self-awareness.

Professional competences are a set of knowledge, skills and attitudes, which are necessary for working in a specialised field or profession in order to perform professional activities in a particular work situation (Professional education law, 1999) and which ensure the performance of work, improving its efficiency. In Latvia, the content of professional education is regulated by the Professional Standard (Professional Education Law, 1999), teachers of preschool, primary and general secondary education have a shared professional standard (Teacher Professional Standard, 2020). In the teaching profession, professional competences are especially important, as the future knowledge, skills and attitudes of students at different educational levels largely depend on them (Āboltiņa et al., 2022).

In Latvia, with the implementation of the Skola2030 competency approach in the educational environment, an ESF study titled "Assessment of student competences in higher education and the dynamics of their development during studies" (Development and Implementation of the Education Quality Monitoring System, 2022) is being conducted in order to identify the professional competences of teachers. However, a unified research tool for assessing the professional competences of teachers has not yet been developed. Therefore, a questionnaire was created for self-assessment of professional competences.

Based on the topicality of the research, the goal of the research was set – to investigate the self-assessment of the professional competences of prospective teachers. The research questions were formulated as follows:

1. How do future teachers evaluate their professional competences?
2. Are there correlations between the sub-competences of future teacher professional competences?
3. Does the age of the student have an influence on their self-evaluations of competences?

In order to achieve the research goal set out in the study and to answer the research questions, various research methods were used, such as literature analysis, document analysis, a questionnaire, data processing with SPSS. The research sample consisted of 98 future teachers from four Latvian universities – the University of Latvia, the Liepaja University, the Jāzeps Vītols Latvian Academy of Music and the Rezekne Academy of Technology – all of which provide higher education programs for teachers. The type of the research design is a case study.

Literature review

Every individual in the 21st century needs fundamental academic knowledge and skills, communication skills and cultivated qualities of character that make a person unique (Pribac et al., 2017). Professional competences are general, integrated and internalised abilities that effectively facilitate sustainable performance (including problem solving, innovation and transformation creation) in specific professional fields. In the context of education, primarily in teaching, professional competence involves the acquisition of diverse and extensive learning materials (Epstein & Hundert, 2002).

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Therefore, the professional competence of teachers refer to the general characteristics that determine their readiness and ability to perform professional activities adequately, independently and responsibly in a constantly changing social and professional environment, so that the professional activities can be performed in a way that continuously supports their so that the professional activities can be performed in a way that continuously supports the students' personalities.

Indicators of the professional competences of teachers include, firstly, that teachers know the content of the subject. Secondly, how teachers facilitate students' acquisition of knowledge and skills, which is related to the use of different teaching methods, respecting the dynamics of student development and the student's age, prior knowledge, and attitude towards the subject. The third indicator is closely related to the pedagogue's interest in the development of students' personalities, solving learning problems, as well as respectful, decisive and consistent behaviour of teachers in the classroom and among colleagues (Widodo et al., 2022). Professional competences of teachers – professional knowledge, skills, beliefs and motivation – are explained as significant predictors of teachers' professional well-being and success (Lauermann & König, 2016). Professional competences have been shown to improve teacher performance (Amalia & Saraswati, 2018; Jie et al., 2020), work productivity (Nisa, 2020), work efficiency (Huda et al., 2020) and student achievement (Andriani et al., 2018).

Professional competences are defined by the "Profession Standard" or by the requirement to have a professional qualification, if a particular profession does not require a "professional standard." In Latvia, there is a shared "professional standard" for teachers working in different levels of education (Teaching Professional Standard, 2020). The "professional standard" is one of the basic, underlying documents that regulates the content of professional education (Law on Professional Education, 2019). Professional competences are defined within it as "the set of knowledge, skills and responsibilities necessary to perform a professional activity in a given work situation" (Law on Professional Education, 2019).

The professional competences of educators determine the quality of education (Rahman, 2014). Well-defined teacher competences serve as a foundation and guide for school practice of future teachers and teachers in education to meet the rapidly changing demands of society (Alan & Güven, 2022). At the same time, identifying these competences allows for the improvement of study curriculum concerning teacher preparation, as the content of the study courses can be based on a clearly defined and structured set of competences to be acquired.

Theoretical research examines models for improving the professional competences of teachers, and emphasises the professional abilities of teachers. According to a group of researchers led by Bertschy (2013), the professional competence of teachers can be viewed as a set of two models. One of these models indicates that the professional abilities of teachers can be improved by sustainable programs of study, by stimulating the professional abilities of prospective teachers and by promoting teachers' pedagogical practice. The second model links the improvement of teachers' professional abilities to

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the continuous learning of pedagogues and development throughout their professional careers (Bertschy et al., 2013).

There are differing opinions about the framework of teachers' professional competences. For example, researchers argue that teachers' professional competences include social, economic, and emotional factors, as well as the individual characters of teachers (Alan & Güven, 2022); that the content of professional competences of pedagogues consists of three parts: internal competences, pedagogical competences and cultural competences (Selvi, 2010). Other researchers believe that all teachers' professional competences can be divided into 3 groups: academic, methodical and personal (Alqiawi & Ezzeldin, 2015).

Purposeful and respectful communication with students and colleagues, lifelong learning, leadership, higher-level thinking, critical evaluation and use of information, teamwork, self-reflection, and ethical behaviour have all been identified within the framework of teachers' professional competences (Strijbos et al., 2015). A. Šteinberga defines the competences of teachers as the use of knowledge, skills, and attitudes during pedagogical activities and that competence is based on pedagogical abilities, which are made up of components such as erudition, high communication culture, cooperation skills, skills to organise activities purposefully, and emotional intelligence (Šteinberga, 2013). Other researchers argue that the content of teachers' professional abilities includes certain key characteristics: knowledge, cognitive skills, high motivation, positive beliefs, and the ability to regulate one's emotions and that based on these abilities and skills, teachers can solve more complex teaching problems and promote student learning (Caena, 2014; Sudarsono et al., 2017). Based on the above, communicative, self-awareness and cognitive management, as well as methodological and organisational competences have been identified (Šteinberga & Kazāka, 2018). So, despite the differences in the description of professional competences, academic, didactic and personal competences are emphasised.

Research concerning teachers' professional competences has highlighted the importance of self-awareness and self-regulation, which are considered as indicators of emotional intelligence and which also influence a teacher's overall professional competence. Educator emotional intelligence is related to effectiveness in teaching (Shahid et al., 2015) and academic performance (Sánchez-Álvarez et al., 2020). Five key indicators have been identified – self-awareness, self-regulation, motivation, empathy and relationship management – that can improve teachers' professional competences in terms of subject, didactic and pedagogical indicators (Makovec, 2018). For example, teachers who have strong self-regulation skills, which are realised by proactively assisting students in the learning process, can facilitate student acquisition of knowledge and skills and the process of internalisation. Similarly, teachers who are highly in empathetic and who are deeply concerned about students' problems, such as difficulties following through on learning, can help students solve personal problems more easily (Widodo et al., 2022).

The professional competence of educators is related to the ability to manage the cognitive process of students and include such characteristics as: knowledge, cognitive skills, high motivation, positive beliefs, and the ability to regulate one's emotions (Caena, 2014; Sudarsono et al., 2017). While the didactic competence of teachers is described as their

ability to manage learning, which includes planning, implementation and evaluation (Rahman, 2014).

Methodology

The research data were collected via the online survey platform QuestionPro. The study used an assessment tool for future teachers professional competences developed in the ESF project 8.3.6.2: "Development and Implementation of the Education Quality Monitoring System" 8.3.6.2/17/I/001 (Miltuze et al., 2021; Rubene et al., 2022). The future teacher professional competence assessment tool was developed from February 2020 to August 2021 in the first stage of the project and improved in the project's second stage. The professional competence of future teachers consists of five competences: Learning process planning (LPP) (16 statements); Learning process implementation (LPI) (20 statements); Professional competences development (PC) (12 statements); Educational establishments and education fields development (EE) (11 statements); Generic competences of ensuring professional activity (PA) (10 statements). Each competence is further divided into sub-competences. In total future teachers' professional competences consist of 5 competences and 22 sub-competences which are measured using a self-evaluation survey that consists of 69 statements which are evaluated on a 7 point Likert scale (where 1 = not characteristic of me at all and 7 = completely characteristic of me). Each competence evaluation is determined by calculating the mean value of the corresponding sub-competences and each sub-competence evaluation is calculated by determining the mean value of the corresponding statements' mean value. Students represent 4 Latvian higher education institutions (University of Latvia, Rezekne Academy of Technologies, Jāzeps Vītols Latvian Academy of Music and Liepaja University). Altogether 98 educational sciences bachelor students or first level higher education students who were in their final year of study participated. Of the participants 90% were women and 10% were men, and their average age was 27 years (Me = 27, SD = 7,52). To determine the reliability of the Likert scales Cronbach's alpha values were calculated. Data was analysed with descriptive statistics. The Spearman rank correlation test was conducted to determine the correlation between future teachers' professional sub-competences. The questionnaire was available for completion from 26 November 2020 to 13 March 2021, and the data were analysed using SPSS and Microsoft Excel. The study followed all ethical research standards in accordance with the General Data Protection Regulation (GDPR). The questionnaire was completed anonymously and participation was entirely voluntary. Approval from the Research Ethics Committee of Social Sciences and Humanities of the University of Latvia was obtained for conducting this research (08.02.2023. Nr. 71-46/35).

Results

To determine the internal consistency of the Likert scale, the value of Cronbach's alpha was calculated. Cronbach's alpha value is 0,964, therefore, the Likert scale is reliable.

The collected data regarding the self-evaluation of future teachers' professional competences were analysed in the competence groups, with the first being "Learning Process Planning." After analysing the data for the sub-competences, it can be concluded that the students rated LPP_1.2, which relates to defining individualised learning goals and planning activities according to attainable outcomes, the highest (mean = 5.42, median = 5.50, SD = 0.92) (see Table 1).

The competence of "Learning process implementation" encompasses 6 sub-competences and 20 statements. In these sub-competences, students scored the highest in LPI_2.1 (mean = 5,91, median = 6,00, SD = 0,83), which are the competences of creating an inclusive, intellectually stimulating, and emotionally safe learning environment that meets the needs of learners and development. However, the lowest rating was in LPI_2.3 (mean = 4.78, median = 5.00, SD = 1.29), which relates to the competences of diagnosing the needs of learners and providing support (see Table 2).

Table 1   Descriptive statistics for the sub-competences within the professional competence "Learning Process Planning"

Sub-competence	Items	Mean	Median	Standard deviation	Variance
LPP_1.1	3	5.19	5.33	0.98	0.95
LPP_1.2	4	5.42	5.50	0.92	0.85
LPP_1.3	4	5.20	5.25	0.96	0.92
LPP_1.4	5	5.31	5.30	1.02	1.04

LPP_1.1 – Competence to plan an interdisciplinary learning process.
LPP_1.2 – Competence to set individualised learning goals and plan activities based on the results.
LPP_1.3 – Competence to analyse the learning process and to plan it according to the needs of the learners.
LPP_1.4 – Competence to choose and develop clear and relevant assessment criteria for learning objectives to be achieved by learners

Table 2   Descriptive statistics for the sub-competences within the professional competence "Learning Process Implementation"

Sub-competence	Items	Mean	Median	Standard deviation	Variance
LPI_2.1	3	5.91	6.00	0.83	0.69
LPI_2.2	6	5.73	5.83	0.82	0.68
LPI_2.3	3	4.78	5.00	1.29	1.67
LPI_2.4	2	5.26	5.50	1.42	2.01
LPI_2.5	3	5.07	5.33	1.09	1.18
LPI_2.6	3	5.10	5.33	1.41	1.98

LPI_2.1 – Competence to create an inclusive, intellectually stimulating and emotionally secure learning and individual development-relevant, collaborative learning environment.
LPI_2.2 – Competence to develop learners' social and emotional competences.
LPI_2.3 – Competence to diagnose the needs of learners and to provide support.
LPI_2.4 – Competence to collaborate with the learners' parents or guardians.
LPI_2.5 – Competence to provide timely and usable feedback to learners regarding their performance, involve learners in the evaluation of their work and offer adequate opportunities and support for performance improvement.
LPI_2.6 – Competence to assess risks associated with the use of digital technologies.

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For the competence "Professional competences development," all sub-competences received high ratings, with self-evaluation mean values being higher than 5. However, a relatively lower rating was obtained for PC_3.3 (mean = 5.14, median = 5.50, SD = 1.34), which relates to the competence of evaluating one's own teaching practice, while taking into account students' learning outcomes, feedback from colleagues, teacher professional standards, and the latest developments in pedagogy. The mean value for the other sub-competences in this group was higher or equal to 5.50 (see Table 3).

For the competence "Educational establishments and education fields development," all sub-competences were rated highly, as the self-evaluation mean values were higher than 5 and very close to each other (see Table 4).

Table 3   Descriptive statistics for the sub-competences within the professional competence of "Professional Competences Development"

Sub-competence	Items	Mean	Median	Standard deviation	Variance
PC_3.1	3	5.60	5.67	0.95	0.90
PC_3.2	4	5.62	5.75	1.01	1.02
PC_3.3	2	5.14	5.50	1.34	1.79
PC_3.4	3	5.50	5.67	1.09	1.19

PC_3.1 – Competence to strategically assess the suitability of the methods used to promote learners' growth and to adapt the content and process of training, taking into account the information obtained in the assessment of learners.
PC_3.2 – Competence to provide professional support by promoting the development of teaching practices of colleagues.
PC_3.3 – Competence to evaluate pedagogical practices, taking into account educational outcomes, feedback provided by colleagues, teacher professional standards, and the latest developments in pedagogy.
PC_3.4 – Competence to plan and organise professional development.

Table 4   Descriptive statistics for the sub-competences within the professional competence of "Educational Establishments and Education Fields Development"

Sub-competence	Items	Mean	Median	Standard deviation	Variance
EE_4.1	3	5.25	5.33	1.16	1.36
EE_4.2	2	5.48	5.50	0.97	0.95
EE_4.3	1	5.09	5.00	1.32	1.75
EE_4.4	3	5.11	5.33	1.27	1.61
EE_4.5	2	5.36	5.50	1.32	1.74

EE_4.1 – Competence to understand the vision for strategic development of an educational institution and to engage in the achievement of its intended objectives.
EE_4.2 – Competence to develop learning content and learning tools, in line with experience, innovation and the latest trends in pedagogy.
EE_4.3 – Competence to understand the strategic objectives of education policies at different levels and to participate in their implementation.
EE_4.4 – Competence to provide constructive feedback and proposals for addressing educational issues.
EE_4.5 – Competence to target and rationally use information and communication technologies (ICT) in the learning process and vocational development.

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Table 5 Descriptive statistics for the sub-competences within the professional competence of "Generic Competences of Ensuring Professional Activity"

Sub-competence	Items	Mean	Median	Standard deviation	Variance
PA_5.1	2	6.26	7.00	0.89	0.78
PA_5.2	2	5.43	5.50	1.44	2.08
PA_5.3	6	4.85	5.00	1.08	1.17

PA_5.1 – Competence to act in accordance with the requirements of the legislation.
PA_5.2 – Competence to communicate freely and correctly in the official language and to express their views in another official language of the European Union.
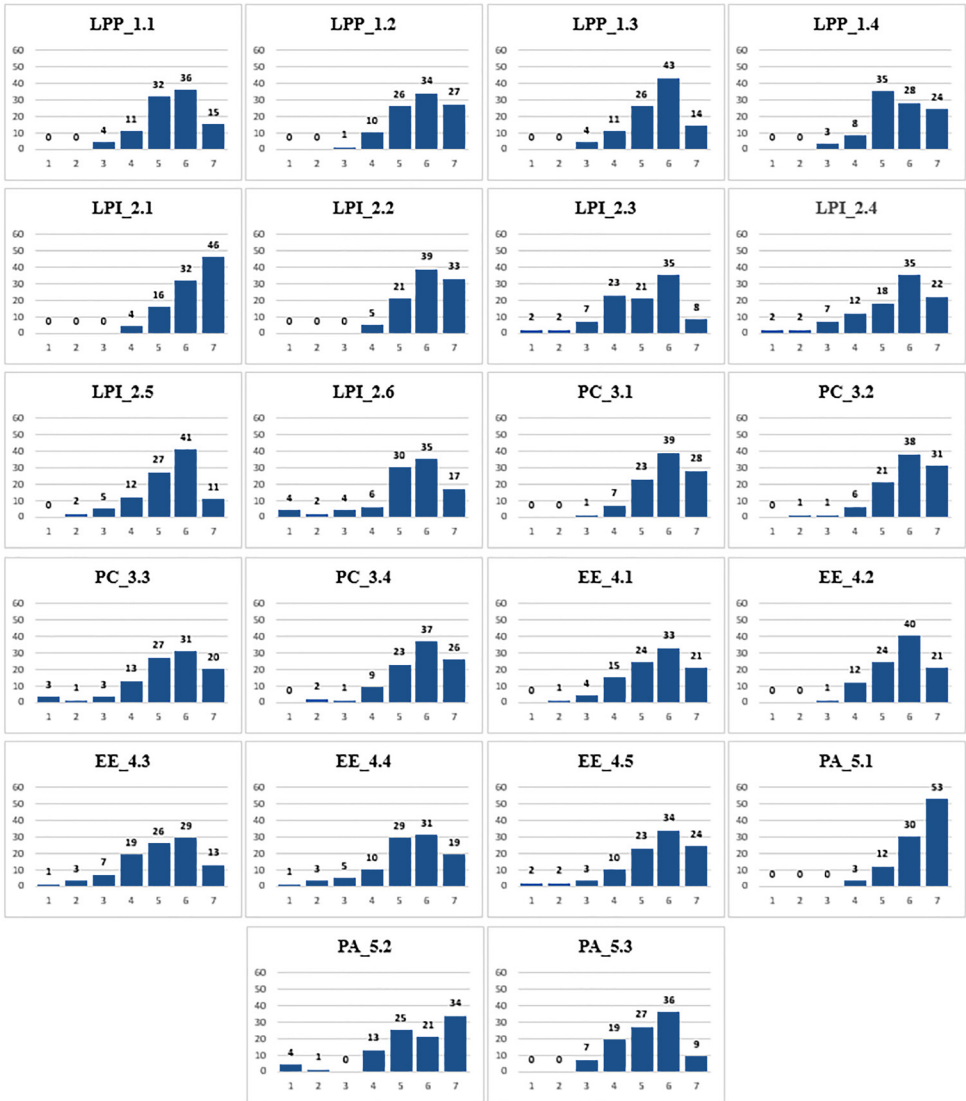PA_5.3 – Competence to assess the state of physical, intellectual, emotional health and to take appropriate action.

The competence "Generic competences of ensuring professional activity" covers three sub-competences, encompassing 10 items. Future teachers self-evaluated themselves the highest in PA_5.1 (mean = 6.26, median = 7.00, SD = 0.89), which is the competence "to act in accordance with the requirements of the legislation." The sub-competence PA_5.1 is the highest rated not only in these competences, but in the survey overall. However, PA_5.3 (mean = 4.85, median = 5.00, SD = 1.08), which is the competence "to assess physical, intellectual, and emotional health status and act accordingly," has been rated relatively low in this competence (see Table 5).

Overall, it can be seen by analysing the descriptive statistics, , that the students have rated sub-competences, such as PA_5.1 (mean = 6.26, median = 7.00, SD = 0.89) the highest, which is the only sub-competence with a mean value above 6. Close to the mean value of 6, there are also the following sub-competence – LPI_2.1 (mean = 5.91, median = 6.00, SD = 0.83) and LPI_2.2 (mean =5.73, median = 5.83, SD = 0.82). On the other hand, the lowest self-evaluations are in the sub-competences of LPI_2.3 (mean = 4.78, median = 5.00, SD = 1.29) and PA_5.3 (mean = 4.85, median = 5.00, SD = 1.08), whose mean self-evaluation values are lower than 5. Based on the self-evaluation data, students have rated themselves highly in the competences of "acting in accordance with legal acts," "creating an inclusive learning environment," and "developing social and emotional competences." However, students rated the diagnosis and support of learners' needs, as well as the assessment of their own physical, intellectual and emotional health and appropriate actions as relatively low. The results indicate that future teachers are confident in their pedagogical professionalism, however, there are problems with assessing the state of personal health, as well as with diagnosing the needs of learners and providing support.

Based on the results of the self-evaluation of future teachers regarding their professional competences, it can be concluded that these sub-competences have developed to higher levels. Over half of the respondents (>49) rated 19 out of 22 sub-competences with a score higher than 6 on the Likert scale (Figure 1).

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Figure 1 Relative distribution of the self-evaluation of future
teachers' professional competences

The sub-competences that received relatively lower scores are LPI_2.3, EE_4.3, and PA_5.3, which are consistent with the results obtained from the descriptive statistics. In conclusion, prospective teachers rated themselves relatively lower in competences related to diagnosing learners' needs and providing support, assessing their own physical, intellectual, and emotional health, as well as understanding and participating in the implementation of educational policies.

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Table 6   Spearman rank correlation between future teacher professional sub-competences

	LPP_1.2	LPP_1.3	LPP_1.4	LPI_2.2	LPI_2.4	LPI_2.5	PC_3.1	PC_3.2	PC_3.4	EE_4.1	EE_4.2	EE_4.4
LPP_1.1	0.676	0.623										
LPP_1.2		0.773	0.671	0.640			0.615					
LPP_1.3			0.721	0.602		0.643	0.699		0.655			
LPP_1.4						0.628	0.637		0.634			
LPI_2.1				0.783								
LPI_2.2							0.713			0.638		
LPI_2.3					0.629	0.702						
LPI_2.5							0.660					
PC_3.1								0.628	0.634	0.621	0.616	0.600
PC_3.2									0.631			0.642
PC_3.3												0.603
EE_4.2												0.622

By analysing the correlation between teachers' professional competences, it can be concluded that they are closely interlinked. A statistically significant moderate or strong correlation ($r \geq 0.3$) exists between 193 of 250 sub-competent pairs and each sub-competence is correlated with at least 4 other sub-competences. After analysing the correlation between the professional competences of teachers, it can be concluded that there is a strong correlation between the sub-competences of 4.EE ("Educational Establishments and Education Fields Development"), whereas the sub-competences of 5.PA (the "Generic Competences of Ensuring Professional Activity") are less related to other sub-competences. None of the sub-competences of the "generic competences of ensuring professional activity" competence has a statistically significant strong correlation ($r \geq 0.6$) with any other sub-competence within the professional competence of teachers. Competences related to strategically assessing the relevance of the methods used and adapting the content, promote the development of students' competence sub-competences, which are more strongly connected to other sub-competences, because they involve setting individualised learning goals, evaluating learning developments, evaluating learning planning for students, developing an inclusive, intellectually stimulating and emotionally secure learning environment, teaching social and emotional skills, evaluating their teaching practices, professional development, and the use of digital technologies. This shows that the competences to strategically assess the relevance of the methods used and adapt the content promote the development of a student's universal application in the work of a teacher. Also, the competence to evaluate the progress of the learning process and plan the training process in line with the needs of the learners, the competence to define individualised learning objectives and to plan activities in line with the results to be achieved, and the competence to choose and develop clear and relevant evaluation criteria for the learning objectives to be achieved by the learners are closely linked to the various other professional competences of teachers.

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Table 7   Spearman rank correlation between future teacher
professional sub-competences and student age

		LPP_1	LPI_2	PC_3	EE_4	PA_5
Students age	Correlation Coefficient	−.037	−.100	−.030	−.195	−.007
	Sig. (2-tailed)	.716	.329	.771	.054	.944

LPP_1 – Learning process planning.
LPI_2 – Learning process implementation.
PC_3 – Professional competence development.
EE_4 – Educational establishment and education field development.
PA_5 – Generic competences of ensuring professional activity.

This points to the fact that the content and expression of skills in student self-esteem are closely linked and the development of professional competences for teachers should be encouraged by explaining the relationship between the areas of activity in a holistic approach.

A Spearman correlation test was carried out to determine whether the student's age affects the self-assessment of students' professional competences (Table 7).

The analysis of the results leads to the conclusion that there is no statistically significant correlation between student age and the student self-evaluation of future teachers' professional competences. This indicates that the development of professional competences among students has not occurred outside of their universities.

Discussion

The curriculum and teaching approach schools in Latvia have undergone changes to introduce competency-based learning, which has led to a need to assess whether teacher training in Latvian universities meets the new requirements. The aim of the study was to assess the professional competences of future teachers, their interconnection, as well as to assess whether the age of the future teacher determines the level of competence.

All assessed professional competences of teachers were evaluated as relatively high, and it can be observed that the average values of self-assessments are similar. This indicates the ability of Latvian higher education institutions to provide high-quality training for future specialists. There was also a close relationship between the sub-competences of the assessed professional competences, with a high correlation between almost all pairs of sub-competences. This indicates both a close connection between these content-related sub-competences and also that by seeing the competences as a whole the organisation of the learning process develops students' understanding of the mutual interaction of the competences.

The analysis of the research results reveals that the age of students does not affect the assessment of professional skills. This indicates that teachers' professional skills and their improvement are sufficiently defined and that their improvement takes place in a well-organised and well-thought-out learning process. Niemi (2012) also points to

the positive impact of specialised teacher training programs on the improvement of teachers' professional competences.

However, the limitations of the tools used in the study should also be taken into account. Self-assessment surveys, which are related to assessment forms, are less accurate compared to objective ability tests or behavioural observations because responses of the respondents can be affected by their limited ability to recall specific examples of their behaviour, by distorted memories of their past behaviour, and by a general tendency to assess themselves, their skills, and their abilities higher than they actually are (Rubene et al., 2021; Miltuze et al., 2021; Dimdiņš et al., 2022).

In order to identify teachers' professional abilities and more fully and comprehensively evaluate teachers' professional competences (including personality, attitudes, values, beliefs), researchers should use and integrate different research methods (Alan & Güven, 2022).

Conclusions

Latvian schools are transitioning to competency-based learning. Therefore, it is necessary to assess whether higher education institutions provide teachers with studies that meet the new requirements. The main goal of higher education is to prepare qualified, competitive future teachers who are able to work effectively. The professional competence of teachers is interpreted in different ways, however, team work and purposeful communication with those involved in the learning process, lifelong learning, leadership, critical evaluation and use of information, self-reflection, and ethical behaviour are the most frequently identified.

The analysis of teachers' self-assessments of their professional competences indicates that professional competences of future teachers can be considered as high, as demonstrated by the high mean values of student self-assessments across all measured sub-competences.

For instance, the competence to create an inclusive, intellectually stimulating and emotionally secure learning and individual development-relevant, collaborative learning environment and the competence to act in accordance with the requirements of the legislation, suggest that future teachers think that they have the necessary competences to provide inclusive education.

There were two sub-competences of future teachers' professional competences that students self-evaluated as below five. Thus, the study process in higher education needs to be revised to implement activities that promote student competence in diagnosing the needs of learners, providing support and competence in assessing the state of physical, intellectual, and emotional health and in taking appropriate action.

The competences of future teachers are highly interconnected, with positive correlations between all measured sub-competences. There are statistically significant moderate or strong correlations between more than 75% of the sub-competence pairs of future teachers' professional competences.

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There is no statistically significant correlation between student age and the student self-evaluation of future teachers' professional competences. Further research is needed to determine whether this indicates that these competences are not developed beyond higher education or if it is due to limitations of self-evaluation as an assessment method.

Acknowledgements

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