FORMATION OF TEACHERS' COMPETENCES IN FURTHER EDUCATION

Inese Augskalne

Riga Higher Institute of Religious Sciences, Latvia

Beatrise Garjane

University of Latvia, Latvia

Abstract. The interest of contemporary society in improving the quality of education is mainly reflected in the issue of educational results - competences - and their provision in the learning process. Introducing the 21st Century educational standards, the development of competencies required for teaching become more relevant. International documents indicate that a teacher should have the ability to teach, effectively use technologies in learning, help students gain transversal competencies. The teacher should be able to participate in research, use innovation, reflect on his/her work, collaborate with colleagues and parents. It is the teacher's duty to direct the student's individual development.

Latvian legislation offers wide opportunities for a person employed in education (especially in vocational and education of interests) to become a teacher. It is possible to work as a teacher after attending a short professional development course in education theory. In that case, competences in education (and the right to work at a school) is certified by the B-course certificate after basic training (72 hours total).

The goal of this study is to identify and characterize teacher's competences in education as acquired by teachers during this course. Research methods are a content analysis of 210 questionnaires filled in by vocational education teachers after attending the course and content analysis of their self-assessment. The results of the research show that teacher's competences are only partially formed and incomplete. The attitude towards the needs of the student's personality is inappropriate, there is a desire for an authoritarian style.

Keywords: further education, competence, learning, teacher, self-assessment.

Introduction

The interest of contemporary society in improving the quality of education is reflected in the issue of competences and the possibility to attain them in the learning process. Efforts to elaborate and implement a competence-based school curriculum have raised the issue of the competences that teachers need to possess in order to be able to implement this curriculum. In the framework of this study, the authors use the term "competences" in the plural so as to specify its content. The study seeks to identify whether and to what extent teachers' competences are shaped through continuous education. According to Latvian

legislation, persons who have completed a 72 contact-hour continuing education course and have obtained a certificate or the right to implement a vocational education course module (Cabinet of Ministers Regulation No. 569 (2018)) may work in the education sector. Thus, the content of competences acquired in this form of teacher education becomes particularly important for pedagogical work. The results of this study illustrate the need of monitoring and planning for further education steps for those teachers.

Literature review

Teachers' competences have been a topical issue in education in the late 20th, as well as the 21st century. Although researchers agree that competences consist of knowledge, skills and attitudes in certain proportions, opinions differ as to the content of these elements. Šteinbeka and Kazāke (2018) state that a teacher holds an important competency regarding communication, guiding self-inquiry and inquiry, as well as methodological and organisational aspects. Stanley, Leboeuf-Yde and Walker (2016) believe that it would not be very objectionable to include knowledge and skills within the concept of competences, but how important are attitudes, values and abilities? This challenge raised by certain authors, which is no longer merely rhetorical, but rather inspires social discourse, has a critical and often destructive impact on teachers' professional foundations (or even the essence of the profession). How does the knowledge and (supposed) skill of a teacher (individual with the right to teach a subject) manifest in intentional pedagogical (nurturing through education) performance?

Employees of pre-schools, schools, vocational education institutions and learning centres, etc. take equal part in continuing education. For example, competences necessary for vocational education teachers tend to be formulated as "a set of knowledge, skills and attitudes ensuring the educator's readiness and ability to implement effective vocational pedagogical and practical work in the constantly changing conditions of the modern education and production process" (Zanhguzinova, 2018, 12). It is notable that the context provided by attitude (individualisation of values), the teacher's personality and culture, which is a prerequisite for the ability to solve complex life challenges through mobilisation of psychosocial resources, is stressed as highly important (Nesipbayeva, 2003; Tiļļa, 2006; Klišāne et al., 2006). Employment of psychosocial resources takes the form of the teacher's self-inquiry, self-analysis of life activities, reflection (Jo Tondeurs, 2018). Educator competences are jointly defined within the concept of pedagogical culture. If it is of an axiological, technological (in a broader sense – professional activity and action) and heuristic nature (Nesipbayeva, 2003), then pedagogical values become the

foundation of deliberate pedagogical knowledge and skills. Pedagogical values as the internal potential of the teacher's personality are meta-competences – the need and ability to find purpose (Bertchy, Künzli, & Lehman, 2013), seek solutions in unsafe and uncertain life situations, deliberately shape one's own future (Homiča, 2009) by combining this need and ability with subject competency.

In its document Supporting Teacher Competence Development (STCD) the European Commission's working group has stated that teaching competences are complex combinations of knowledge, skills, understanding, values and attitudes, which resonate differently in different national contexts (STCD, 2013). The document notes that teachers should have a specialist knowledge of the subject(s) (subject competence) they teach, as well as the necessary pedagogical knowledge and skills, including the ability to teach heterogenous classes, making effective use of ICT, and helping students/pupils to acquire transversal competences (communication competence); they have to be able to engage in research (inquiry and self-inquiry competence), learn about and make use of innovations, reflect on their own performance, collaborate with colleagues and parents, participate in the development of the school (STCD, 2013). It is crucial that the importance of the meta-competence of learning to learn is highlighted, where the lessons are learning and teaching life, similarly to the idea found at the heart of the competence-based approach (Cabinet of Ministers Regulation No. 747 of 2018).

Obviously, the results that can be obtained through 72 contact-hours of a continuous education course can only partially be called teachers' competences. However, the results obtained ought to be viewed as a sufficient foundation for pedagogical work. For the empirical study, an explicitly simplified understanding of competences has been used. Competences are understood as a deliberate combination of knowledge, skills and attitudes, where attitudes are founded upon constructive and conscious life values (Garjāne & Augškalne, 2012).

The study is based in practice and data obtained from evaluation questionnaires. The aim of the study is to determine whether and to what extent the teachers' competences are shaped by the 72 contact-hour course "Fundamental pedagogical work". The course allows individuals to obtain a certificate or the right to implement a vocational education subject module.

Methodology

The study employed a survey with a semi-structured questionnaire at the end of the course "Fundamental pedagogical work". The questionnaire contained reflective open-ended questions thus indirectly allowing respondents

to contemplate the personal and professional significance of their performance as a course participant. 210 questionnaires were collected from the course graduates. The course "Fundamental pedagogical work" was held in 2017 in several cities throughout Latvia (Rīga, Cēsis, Liepāja, Jelgava) and it was attended by specialists from various areas who were already working as teachers in interest education, vocational education, schools and pre-schools (without a prior pedagogical degree). The education area and capacity in which the course participants had worked differed greatly – from several months to 10+ years. The questionnaire was anonymous – it did not contain any questions requiring identifying information about the respondent, however it did note the time and location of the course.

The course was divided into four equal content blocks: contemporary pedagogical theory and practice, learning and the organisation of the learning process, personal development and learning at various ages, organisation of the pedagogical process in a multi-cultural environment in the context of inclusive education. The course was based on adult education practices, employing versatile methods and forms of work to encourage participants to analyse, evaluate and reflect on their pedagogical experience.

This article expresses and characterises competences in 3 aspects – knowledge (in psychology, didactics), skills (to teach and to learn), attitudes (human values, traits). In order to determine the link between the goal and the course result obtained, the objective for attendance by the participants was first identified.

Research Results

The result of any educational activity is, to a large extent determined by its objective. Therefore, the first question on the questionnaire sought to identify the reasons for participants attending course.

Respondents could choose one of the given answer options, mark more than one answer or indicate a different – special – reason for attendance. Figure 1 demonstrates that most respondents (192 – Fig.1) indicated that their objective was to obtain and top-up their knowledge, while a significant number of respondents (57 – Fig.1) indicated that their goal was to obtain a course certificate. This answer has a dual interpretation: on the one hand, the certificate is necessary for teachers to be able to continue working, and that is the reason why they are attending the course. Likewise, it can also be appreciated that the respondents have answered honestly, rather than indicating the "correct" answer. At the same time, such an answer also gives reason to wonder if approximately a quarter of the course participants are giving proper attention to the content of the course and truly gaining knowledge in pedagogy. It must be noted that the data

for this aspect has not been expressed as a percentage, because respondents were allowed to indicate more than one answer.

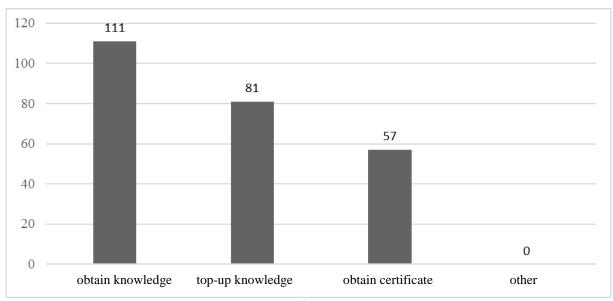


Figure 1 Objectives for course participants

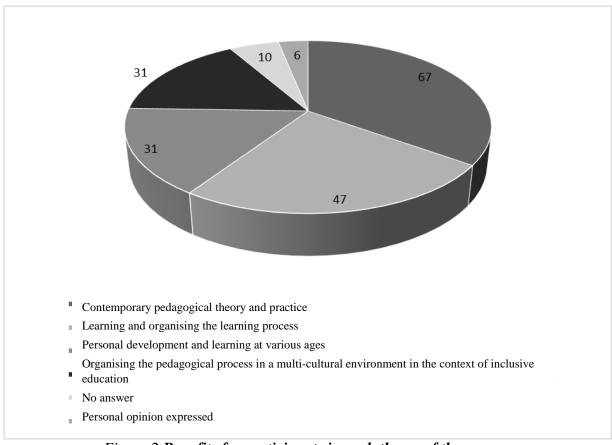


Figure 2 Benefits for participants in each theme of the course

Indicating what they had gained from each theme in the course (Figure 2), 67 respondents stated that they had obtained knowledge and understanding about contemporary pedagogical theory and practice, 47 – about learning and organising the learning process, 31 – about personal development and learning at various ages, 31 – about organising the pedagogical process in a multicultural environment. 10 respondents chose not to answer this question and 6 others expressed their personal opinions not directly related to the question.

When asked if they thought that the length of the course was sufficient, 39% gave an affirmative answer, 26% partially agreed with the statement, 35% did not answer, thus giving rise to reasonable doubt as to the understanding of pedagogy that they obtained, and 0,5% gave a negative answer (Figure 3).

When asked to comment on their choice of answer, the participants indicated:

- *The course needed a practical module;*
- The course needed more practical tasks;
- The course needed examples for methods;
- The course was lacking in psychology.

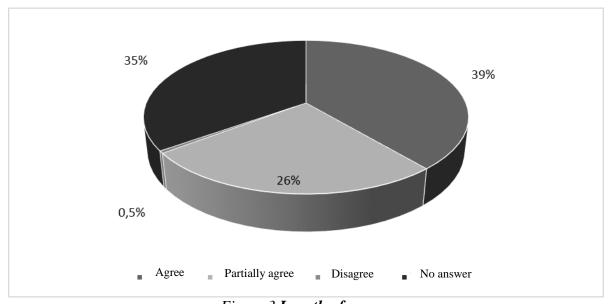


Figure 3 Length of course

The statistical breakdown of the responses may indicate that course graduates are not able to assess the sufficiency or insufficiency of the amount of knowledge gained (35% of respondents did not answer the question – Fig.3). The comments show that teachers would like to receive more practical advice or suggestions, which may indicate the limitations in the course volume and the proportion between theory and practice in the course content. However, it seems that currently the course participants have an insufficient understanding of the

subject matter as they markedly prefer to receive individual instruction from the lecturer on how exactly to act in specific situations. Now, a trend can be observed that, instead of seeking pedagogical solutions on their own or in collaboration with colleagues, teachers are expecting ready-made instructions and a "correct" universal method to apply.

About one third (69) of the respondents supplied elaborated answers regarding their takeaways from the course. After analysis of the indicated specific results, they have been divided into three sections – knowledge (in psychology, didactics), skills (to teach and to learn), attitudes (human values, traits).

Competences gained	Number of answers
Knowledge (unspecified)	8
Knowledge (theoretical/ general)	16
Skills, teaching methods	27
Attitudes	16
Total	69

Table 1 Analysis of results obtained from course

Knowledge that could be interpreted as "I know/assume that I know what that is" – is found in 8 expressions (Table 1) which are only partially related to teacher's competence:

- Organising the study process;
- Approaches that can be applied in practice in adult education;
- Learning styles;
- *Understanding human relations;*
- Assessing teaching situations;
- *Reflection*.

Wording as to the knowledge gained also contains expressions (16 cases out of 69 – Table 1) that may signify unspecific revelations, as well as repeating phrases that have been retained or the disinclination to express an honest opinion. The following expression may be interpreted as uncertainty (here and henceforth wording from answers is provided with style intact, but grammatical errors have been corrected):

- Organising the pedagogical process;
- An overview of pedagogy in general;
- Fundamental pedagogical practices;
- *Theoretic knowledge about innovations;*
- Understanding pedagogy;

- Practical application of theoretic knowledge. Retained expressions:
- *Practical application of theoretic knowledge;*
- How to improve interactions;
- *Theoretical material;*
- *Theoretical information;*
- *The person is the central point.*

The following phrases may signify a reluctance to give an honest answer:

- Where to find information; general knowledge;
- *Information*;
- *The certificate provides the opportunity to work and earn a living;*
- Broadened perspective.

It must be noted that many of the course participants lack sufficient proficiency in Latvian, which hinders their ability to understand and express themselves about their experience with the course.

The skills resulting from the course can mostly be classified as acquisition of teaching methods. The expectations of course participants remain unchanged as to obtaining direct information about teaching methods and moreover – ones that will provide immediate teaching success in working with pupils and adults, will be applicable always and for everyone. For example:

- *How to plan lectures;*
- Ways to work with students;
- Teaching methods for teaching adults;
- Practical examples, stories from teachers' experience;
- New teaching methods;
- Various methods;
- Methods for working with difficult customers;
- *Methods for assessing the audience.*

Although the course lecturers try to employ and analyse as wide a range as possible of teaching methods that are suited for schools, as well as adult education, stressing that there are no universal methods or practices, the stereotypical view that pedagogy (especially didactics) must provide them in both theory and practice persists.

Teaching methods have been noted as an important takeaway from the course on 27 questionnaires (Table 1). It can be ascertained from the answers that the course participants work with adult audiences with specific requirements as to pedagogical practice, as well as in schools and higher education institutions. There are conclusions noting the organising of lessons, including planning, teaching methods and approaches aimed at attaining specific teaching

goals, etc. Course participants are satisfied that hand-out material has been provided, information resources indicated, specific examples studied:

- A lot of hand-out material that can be used;
- Materials and visuals;
- *Internet links for methods;*
- *Methodology for preparing lessons;*
- Planning lessons, how to begin a lesson.

However, as previously mentioned, some course participants were dissatisfied that their specific cases were not solved during the course, which, in turn, would support the assumption that, during the course, it is nearly impossible to make the participants fully grasp the idea that a teacher's professionalism lies within their ability to think critically and independently, act creatively. In this respect there is one (and only one!) conclusion to be noted saying that lessons ought to be viewed as purposeful and compatible with the students' ability and opportunity to learn:

• Organisation and choice of methods suited for the teaching objective.

In the assessment of results, the importance of attitudes (18 out of 69 answers, see Table 1) had been indicated and attributed to interaction with pupils and other audiences, as well as to the participants' self-assessment of their performance. As regards teaching and nurturing through education, conclusions have been drawn that people learn differently, they have different aptitudes, but everyone is of value, and patience, tolerance, empathy and mental balance are essential traits for a teacher. Participants indicate that during the course, they have recognised their own abilities, felt encouraged to work and reflect on their pedagogical performance, continue their own education in pedagogy and psychology. The following benefits have been listed, for example:

- Opportunity for thought and discussion;
- Teamwork skills;
- Mutual understanding between students and teachers is needed;
- An individual approach is needed;
- A chance to reflect on your own performance;
- Desire to keep learning;
- Encouragement;
- I set my internal world, mindset in order;
- I gained confidence that I can give lectures, understanding the diversity of the audience;
- The main difference between people is in their values;
- I understood that I need to be more tolerant, because everyone is different;

- Teach with a democratic style, because the person is at the centre of it all:
- I gained an understanding of myself, gained encouragement.

The article covers only one year of course results; however, it can be reasoned that only 33% of the 210 people who obtained a certificate have formulated the experience gained as a potentially useful foundation for purposeful pedagogical work. Based on the content of the opinions provided, it can be concluded that their wording indicates the presence of meta-competence (individual learning experience). Of course, shortcomings in the content of the course and the work of the lecturers can be sought and indeed found, however, the opinions expressed by course participants, which were analysed in the study, signify the opposite – that the content provided is sufficient for reaching the objective as long as the participants themselves possess proper motivation and the skills to learn on their own. If not, then are 72 hours enough for society to expect quality of education in line with modern requirements?

Conclusions

- 1. The formation of teachers' competences as a deliberate combination of knowledge, skills and attitudes has been established as the attainable goal and result of the 72 contact-hour course "Fundamental pedagogical work".
- 2. Due to the shortage of professionals in the education sector (general education, vocational education, interest education), the possibility to take a 72-hour course could promote new recruits to the pedagogical process.
- 3. The results of the study show that the 72-hour course "Fundamental pedagogical work" only partially succeeds in forming pedagogical competences, as specific knowledge and skills to implement unified teaching and educational nurturing activities and collaboration respecting personal values can be identified in only about 1/3 of the self-assessments provided by participants.
- 4. The results of the study show that the content of the course "Fundamental pedagogical work" allows for the obtaining of initial pedagogical competences, however, the shaping of participants' meta-competences needs to be activated.

References

Bertchy, F., Kunzli, C., & Lehman, M. (2013). Teachers' Competencies for the Implementation of Educational Offers in the Field of Education for Sustainable Development. *Sustainability*, *5*, 5067-5080; DOI: 10.3390/su5125067

- Garjāne, B., & Augškalne, I. (2012). Skolotāju kompetences un jauniešu pasaules uzskats. Scientific Journal of Riga Technical University. The Humanities and Social Science. History of Science and Higher Education, Vol.20, 64-67.
- Homiča, A. (2009). *Konstruktīvisma pieeja profesionālās fiziskās sagatavotības kompetences pilnveidē Latvijas policijas akadēmijas studentiem*. Promocijas darbs. Latvijas sporta akadēmija, Rīgā. Pieejams (only in Latvian) https://www.lspa.lv/files/research/theses/A.Homica/Promocijas_darbs_1dala.pdf
- Klišāne, J., Brante, I., Helmane, I., Turuševa, L., Rubene, Z., Tiļla, I., Hahele, R., & Maslo, I. (2006). Plaisa kompetences izpratnē teorijā un praksē. No Maslo, I (red.) *No zināšanām uz kompetentu darbību*. Rīga, LU Akadēmiskais apgāds.
- Ministru kabineta Noteikumi par pedagogiem nepieciešamo izglītību un profesionālo kvalifikāciju un pedagogu profesionālās kompetences pilnveides kārtību, Nr.569 (2018). Pieejams (only in Latvian) https://likumi.lv/ta/id/301572-noteikumi-par-pedagogiem-nepieciesamo-izglitibu-un-profesionalo-kvalifikaciju-un-pedagogu-profesionalas-kompetences-pilnveides
- Ministru kabineta Noteikumi par valsts pamatizglītības standartu un pamatizglītības programmu paraugiem Nr.747 (2018). Pieejams (only in Latvian) https://likumi.lv/ta/id/303768
- Nessipbayeva, O. (2003). The Competencies of the Modern Teacher. Towards a learning profession. The teacher competencies framework and the continuing professional development of teachers. Advisory Committee on Teacher Education and Qualifications, 148 154. Retrieved from: https://files.eric.ed.gov/fulltext/ED567059.pdf
- Stanley, I., Leboeuf-Yde, C., Bruce, F., & Walker, B.F. (2016). Similarities and differences of graduate entry-level competencies of chiropractic councils on education: a systematic review. *Chiropractic and Manual Therapies*. DOI: 10.1186/s12998-016-0084-0.
- Supporting Teacher Competence Development for Better Learning Outcomes (2013). *European Commission. Education and Training*. Retrieved from: http://ec.europa.eu/assets/eac/education/experts-groups/2011-2013/teacher/teachercomp_en.pdf
- Šteinberga, A., & Kazāke, D. (2018). Skolotāju kompetences struktūra un saturs. *Sabiedrība*. *Integrācija*. *Izglītība*. *Starptautiskās zinātniskās konferences materiāli, II daļa*, 487-494. Tilla, I. (2005). *Sociokultūras mācīšanās organizācijas sistēma*. Rīga: RaKa.
- Tondeur, Jo (2018). Enhancing future teachers' competencies for technology integration in Education: Turning theory into practice. *International Journal of Media, Technology and Lifelong Learning 14*, 2, 216 224. Retrieved from https://journals.hioa.no/index.php/seminar/article/view/2981/2884.
- Zhanguzhinova, M. (2018). *Studentu topošo profesionālās izglītības pedagogu profesionālās kompetences veidošanās Kazahstānas augstākajā izglītībā*. Promocijas darba kopsavilkums pedagoģijas doktora zinātniskā grāda iegūšanai. Retrieved from http://www.rta.lv/uploads/source/content_LV/zinatne/doktorantura/promocijas_darbu_k opsavilkumi/SUMMARY-Zhanguzhinova-10,3,2018.pdf.