



## **An Analysis of Learning Outcomes Achieved through Pedagogical Competencies Acquisition Programme in the Republic of Croatia**

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Education has long been recognized as the key to the survival – not only of the individual – but of society as a whole. A number of challenges emerged and one is required to master certain new knowledges and skills. The key role in training an individual to be able to readily tackle the challenges of the 21st century is one played by the education system, i.e. teachers. The importance and necessity of teacher training has been recognized in numerous European and Croatian documents and in recommendations based on various scientific research. The aims of this paper are to single out the key teachers' competencies and to analyse the learning outcomes of lifelong learning programmes that focus on acquisition of pedagogical competencies in the Republic of Croatia with both qualitative and quantitative research method. The conducted analysis showed that no programme with its compulsory part ensures the acquisition of the necessary key teachers' competencies but also seeks to provide them with the elective part of the programme. This means that acquisition of key pedagogical competencies is left to the volition of students who may or may not enrol in certain elective courses. The obtained results indicate there is a need to design and prescribe a single programme at the national level, one that would be certain to ensure that all the teachers acquire key pedagogical competencies through the completion of the programme.

Keywords: learning outcomes, lifelong learning, pedagogical, competencies, teachers

### **INTRODUCTION**

Being the main agent of creativity, organisation and moderation of the teaching process, a teacher is the cornerstone of the comprehensive education process. The merits of the work of the teachers are rooted in their competencies related to subject knowledge and knowledge of teaching (Alimuddin et. al, 2020, 428; Neopriyeni et. al, 2019, 530). The later competencies can be acquired through initial education or through comprehensive

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training programmes that comprise pedagogical, psychological, didactic and methodological aspects of teaching (PPDM programmes).

The PPDM programmes in the Republic of Croatia are tailored for individuals of other professions who want to teach in the schools. By virtue of their employment in the education, they are required to take up PPDM programme in order to acquire pedagogical competencies. The requirement also applies to individuals who wish to work in education institution but their initial education did not provide pedagogical competencies. In Republic of Croatia, the PPDM programme is implemented as a part-time study and a part of lifelong learning system. Each course is defined by the syllabus with certain number of ECTS points allocated for each course. By the completion of the training, the enrollees achieve a total of 55 to 60 ECTS points in the field of pedagogical competencies required for teaching in primary and secondary schools. The PPDM training programme is completed by the successful passing of exams in all courses of the syllabus, i.e. by scoring the required number of ECTS points.

Since the teacher's education system is foundational for the advancement in teachers' competencies, its furtherance is one of the most important European and global strategic goals. In the early 21st century, the European Union adopted a series of documents aimed at creating a framework for improving teachers' competencies. The starting point of the most of these documents is the idea that key teacher competencies can be common to different education systems, despite social, cultural and political differences and circumstances prevailing in different countries. Regarding aforementioned documents, recommendations and standards prevailing in European and Croatian documents related to teacher competencies as well as scientific literature, the aim of this paper has been singling out key teacher competencies.

These competencies have been used as a criterion for analysing the programme of acquiring pedagogical competencies in lifelong learning at five Croatian universities and they can also be used as a starting point for analysing the quality programmes of acquiring pedagogical competencies in other European countries.

### **Context And Review of Literature**

One of the most important documents, affecting each member state of the EU, is *Common European Principles for Teacher Competences and Qualifications* adopted by the European Commission and which defines the three areas of teachers' competencies. According to this document, teachers should be able to cooperate with others in the sense of being inclusive, encouraging and willing to cooperate; use knowledge, technology and information so that they can transfer different knowledge, use technology effectively and have professional information, i.e. have the skills to prepare students for life as European citizens who think globally (EU, 2005).<sup>1</sup>

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<sup>1</sup> There are other European Commission documents such as *Improving the Quality of Teacher Education*, 2007, which aimed to improve the competencies of teachers, emphasizing the importance of professional and pedagogical knowledge of teachers, the importance of knowledge and skills to use different strategies, the importance of self-evaluation and continuous

In its 2003 document entitled *Teacher professional development: an international review of the literature*, UNESCO emphasizes that teacher competencies are those that include: general pedagogical knowledge, professional knowledge, teaching prowess, the skill of connecting theory and practice, the skill of creating a positive learning environment, knowledge and skills of teaching children coming from varying cultural, social and linguistic backgrounds, skills to adapt the teaching process to specific social and political circumstances, knowledge and skills of implementing technology in the teaching and learning process (Villegas-Reimers, 2003). In addition, the OECD project *Definition and Selection of Competences. DeSeCo, Theoretical and Conceptual Foundations: Strategy Paper* of 2002 suggested a theoretical framework for what we might dub 'key teacher competencies. According to the project, teachers' competencies are divided into three larger interconnected areas: acting autonomously, using tools interactively, and functioning in socially heterogeneous groups (OECD, 2002).<sup>2</sup> The continuation of this project is an OECD document called *Future of education and skills 2030. OECD Learning Compass 2030* created in 2019, which, using the metaphor of the "learning compass", outlines the competencies that students need in order to cope better, either individually or in cooperation with others, in what the future may hold for them. The document identifies four types of knowledge, i.e. disciplinary, interdisciplinary, epistemological and procedural,<sup>3</sup> while types of skills are classified as cognitive and metacognitive; social and emotional; practical and physical<sup>4</sup>, while values and attitudes include those that lead towards individual, societal and environmental well-being and those that will build an inclusive, fair and sustainable society (OECD, 2019).

Another important document, which adopted a comprehensive list of teacher competencies in 2005, is the *Tuning Educational Structures in Europe: Universities' Contribution to the Bologna Process. Final Report. Pilot Project - Phase 2*. The

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improvement. Another document, *Literature review Teachers' core competencies: requirements and development* (European Commission, by F. Ceana) which, *inter alia*, includes professional and pedagogical knowledge and the need to encourage innovation, cooperation, autonomous learning, etc. as the key competencies of teachers. 2013 The European Commission also adopted a document entitled *Supporting Teacher Competence Development for Better Learning Outcomes*, which determines the importance of teacher competencies and, based on scientific studies, lists the competencies of teachers.

<sup>2</sup>As a specific competence, the ability to use tools interactively implies skills of interactive use of language, text and symbols; skills of use knowledge and information as well as technology. Interaction competence in heterogeneous groups includes skills of cooperation, identification with others and the ability to resolve conflicts. The competence of autonomous action includes skills related to the ability to see "the big picture", the ability to realize personal projects and assert themselves with their own interests, limitations and needs.

<sup>3</sup>Interdisciplinary knowledge entails skills of correlating courses/disciplines. Epistemic knowledge entails the skills of helping students understand the importance of learning and applying the learned. Procedural knowledge refers to the skills of understanding how something came about, more precisely the series of steps were taken to achieve a given goal. (OECD, 2019, 74).

<sup>4</sup>Cognitive and metacognitive skills include critical and creative thinking, learning how to learn, and self-regulating processes; social and emotional skills include empathy, efficiency, responsibility, and cooperation, while practical and physical skills relate to the use of new information and communication technologies (OECD, 2019, 86).

document lists as teachers' competencies - commitment to learners' progress and achievement, competence in a number of teaching/learning strategies, competence in counselling learners and parents, Knowledge of the subject to be taught, ability to communicate effectively with groups and individuals, ability to create a climate conducive to learning, ability to make use of e learning and to integrate it into the learning environments, ability to manage time effectively, ability to reflect upon and evaluate one's own performance, awareness of the need for continuous professional development, ability to assess the outcomes of learning and learners' achievements, competence in collaborative problem solving, ability to respond to the diverse needs of learners, ability to improve the teaching/learning environment, ability to adjust the curriculum to a specific educational context (González & Wagenaar, 2005, pp. 85-86).

In their work, Bransford et al, 2005, wrote about teachers' competencies and pointed out that these competencies include knowledge about students and their ways of learning and development within a social context; understanding the content and objectives of the curriculum, content of the course and teaching methods appropriate for the given requirements of the discipline of each course and learner's needs; understanding teaching skills and how to evaluate and steer the teaching process (Bransford et. al, 2005, p.10). On the other hand, McDiarmid and Bright, 2008, emphasize that the three key categories of the teacher competencies are knowledge that includes the professional and pedagogical, but also knowledge that includes legislation, knowledge of child and youth development, motivation processes, learning theories; teaching skills that include skills in planning, organizing and conducting teaching, disciplining students, leading groups, using teaching materials and technology, skills involving working with colleagues, parents, and possessing certain beliefs, attitudes, values, and commitment (McDiarmid & Cleverger-Bright, 2008, p. 134). Nessipbayeva in 2012 cites skills and knowledge of leadership and management as 21st century teacher competencies; creating an environment for different groups of learners; knowledge of curriculum; knowledge and skills of fostering the learning process; self-reflection of the teaching process (Nessipbayeva, 2012, pp. 151-153). There are also those scientists who divide the competencies of teachers into two basic categories - professional and personal competencies. Professional competencies include professional and pedagogical knowledge and skills such as successful planning, organization and management skills, communication skills, encouraging the learning process, knowledge of the curriculum, etc. On the other hand, the personal skills that teachers should possess are, for example, patience, enthusiasm, sense of justice, sacrifice, fairness, self-confidence (Liakopoulou, 2011; Moreno Rubio, 2009; Ljubetić & Kostović-Vranješ, 2008).

In Republic of Croatia, scientists have written about teacher competencies. The results of a survey conducted in 2005 highlight as teacher competencies - professional knowledge, application of teaching methods in skills, application of information and communication technology in teaching, application of practical skills, methods of monitoring and evaluating students' knowledge, teaching planning, communication and cooperation with parents, classroom management, communication and cooperation with parents, developing students' self-awareness and self-esteem, encouraging open communication and collaborative relationships among students, working with students

with learning difficulties, working with gifted students, encouraging critical thinking and creativity in students, developing independent learning skills, developing ethical reasoning and behaviour in students, readiness for self-evaluation, etc. (Vizek Vidović et al., 2005). In addition to the mentioned research, Jurčić 2012 points out that the competencies of teachers can be examined with basic areas of their work in mind. In particular, the teacher's competencies are linked to the curriculum design; organization and management of the educational process; shaping the classroom environment; evaluation of student achievement; educational partnership with parents (Jurčić, 2012). In addition, Jurčić distinguishes two areas of professional competencies of teachers – one is pedagogical and the other is didactic, emphasizing that both areas are closely linked. He divided the pedagogical competence of teachers into eight dimensions: personal, communication, analytical (reflective), social, emotional, intercultural, developmental and problem-solving skills, while the didactic competencies were divided into five dimensions: curriculum design technique; organizing and conducting the educational process; shaping the environment in the classroom; determining student achievement in school; development of the model of educational partnership with parents (Jurčić, 2014, pp. 79-87). Referring to UNESCO's internationally accepted standards, Munjiza and Lukaš, 2006, emphasize knowledge of the psychological development of students and the conditions of teaching; knowledge of general laws and norms governing the pedagogy area; knowledge of general didactic rules; knowledge of the methodology of the teacher's core profession (Munjiza & Lukaš, 2006, p. 371). In addition to the above, Lončarić & Pejić-Papak, 2009, propose a framework of teacher competencies based on four areas and groups of competencies - professional skills and abilities that include organizational and leadership skills and interpersonal skills and knowledge of student characteristics (needs, abilities and development); professional knowledge and expertise related to the curriculum, education, evaluation, learning and teaching, followed by literacy in languages, mathematics and IT, health and science education as well as education and for sustainable development; creation and development of new knowledge or research and creation of new scientific knowledge; professional and educational values and personal commitment to work are often related to values, ethics, tolerance, critical and active citizenship, entrepreneurship and freedom of expression, creativity and art (Lončarić & Pejić-Papak, 2009, p. 12).

When it comes to understanding and determining the competencies of teachers in the 21st century in the Croatian educational context, one must mention the *National Curriculum Framework*, from 2017. *The National Curriculum Framework* is a basic educational document of the Republic of Croatia which, *inter alia*, prescribes the goals of educational activities or competencies that children and young people should develop regardless of the type and level of education. Such competencies in the mentioned document are called generic competencies and they are defined as those that enable children and young people to face the challenges of the 21st century. The definition of this type of competence indicates, as with other seminal educational documents, the knowledge and skills that teachers should possess as they are the ones that must forward these competencies to the learners. Thus, the *National Curriculum Framework*, lists generic competencies grouped in three major sections – forms of thinking (problem

solving, decision making, metacognition, critical thinking, creativity and innovation); forms of work and use of tools (communication, cooperation, information literacy, digital literacy and use of technology) and personal and social development (self-management, personal and social development management, connecting with others, active citizenship) (MZO 2017, 15 – 18). In addition, considering this document, one can surmise that there are additional competencies that the teachers need to possess. Thus, for example, it is clear that teachers must be trained to conduct teaching on the topics that span multiple disciplines, which, due to their complexity and since they are novel concepts in the educational system, require special competencies. These are - Entrepreneurship; Learn how to learn; Personal and social development; Information and communication technology (ICT); Health, safety and environmental protection; Civil education. In addition, separate set of legislative documents emphasize the importance of teachers' development of competencies to require for work with children with special educational needs (students with disabilities and gifted students); competencies related to the evaluation of student achievement and competencies that concern process of self-evaluation of educational work (MZO 2017).

The latest iteration of national guidelines and standards governing teacher competencies in Republic of Croatia is the *National Qualification Standard for Teachers as Basis for the Introduction of Teacher Licensing System*. The Standard provides a list of qualifications required for any individual wishing to become a licensed teacher in primary and secondary education. Qualification standard present the content and structure of a particular qualification, which includes all the information for determining the level, scope and profile of qualifications and the information needed to ensure and improve the quality of qualification standards. In the mentioned *National Qualification Standard for Teachers*, the key qualifications are - Learning and teaching; evaluation; a learning environment in terms of creating a positive learning environment; cooperation at school (both with the families and the community); the education system and the organization of the school in terms of understanding and improving thereof; professional demeanour in communication and interaction; professionalism and professional development. For each of the qualifications, learning outcomes are described, which in turn are intended to be included in each programme that covers this particular qualification standard (NCVVO 2015, 4). Each of the competencies that teachers in primary and secondary schools in Republic of Croatia need to acquire can be derived from the learning outcomes described. *The National Qualification Standard for Teachers as Basis for the Introduction of Teacher Licensing System* is currently the most unambiguous source of information of what a future teacher is expected to know and be able to produce in educational activities in primary and/or secondary schools, therefore the competencies from this document are considered as key competencies for Croatian teachers.

## **METHOD**

### **Procedure and sample**

The aim of the research was to determine whether accredited programmes for the acquisition of pedagogical competencies within lifelong learning at five separate

Universities<sup>5</sup> in the Republic of Croatia indeed provide the acquisition of key pedagogical competencies for primary and secondary school teachers. 263 learning outcomes from all courses in the compulsory fields of pedagogy, didactics, psychology, methodology and 254 learning outcomes from all courses offered in the elective part of the programmes were analysed. The learning outcomes of compulsory and elective courses are analysed, since on the basis of these outcomes it is possible to surmise which teachers' competencies are offered by the programmes available.

As a criterion for analysing the aforementioned programmes the following teacher competencies have been singled out based on the scientific literature and documents, recommendations and standards prevailing in European and Croatian documents related to teacher competencies:

(1) Competencies related to the content of the course, basic legislation applicable to the process of education and knowledge related to pedagogical theories necessary for understanding educational activities (Bransford et al., 2005; Nessipbayeva, 2012; Williamson McDiarmid & Clevenger-Bright, 2008; Liakopoulou, 2011; Moreno Rubio, 2009, Ljubetić & Kostović-Vranješ, 2008; Vizek Vidović, V. et al., 2005; Munjiza & Lukaš, 2006; Lončarić & Pejić-Papak, 2009; Villegas -Reimers, 2003; González & Wagenaar, 2005).

(2) Competencies that include planning, preparing, organizing and conducting the teaching process (Kyriacou, 2007; Bransford et al., 2005; McDiarmid & Clevenger-Bright, 2008; Nessipbayeva, 2012; Liakopoulou, 2011; Moreno Rubio, 2009, Ljubetić & Kostović-Vranješ, 2008; Jurčić, 2012; Lončarić & Pejić-Papak, 2009; Villegas-Reimers, 2003; NCVVO, 2015; TKCOM, 2018).

(3) Competencies related to good communication skills (González & Wagenaar, 2005; European Commission, 2019; Bransford et al., 2005; TKCOM, 2018).

(4) Competencies involving collaboration with students, colleagues and parents (McDiarmid & Clevenger-Bright, 2008; Liakopoulou, 2011; Moreno Rubio, 2009; Ljubetić & Kostović-Vranješ, 2008; Vizek Vidović, V. et al., 2005; Jurčić, 2012; González & Wagenaar, 2005; NCVVO, 2015; TKCOM, 2018).

(5) Competencies related to the selection and use of various teaching methods, strategies, forms and information and communication technology (McDiarmid & Clevenger-Bright, 2008; Vizek Vidović, V. et al. 2005; UNESCO, 2018).

(6) Competencies related to the process of evaluation and assessment of student achievement and self-evaluation (Kyriacou, 2007; Bransford et al., 2005; Jurčić, 2012; Nessipbayeva, 2012; Vizek Vidović, V. et al., 2005; González & Wagenaar, 2005; TKCOM, 2018).

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<sup>5</sup> University of Osijek, University of Rijeka, University of Split, University of Pula and University of Zagreb.

(7) Competencies related to creating a stimulating classroom environment and discipline and stress management in teaching (Kyriacou, 2007; Bransford et. al., 2005; McDiarmid & Clevenger-Bright, 2008; Jurčić, 2012; Villegas-Reimers, 2003; González & Wagenaar, 2005; NCVVO, 2015).

(8) Competencies related to respecting and integrating students of varying abilities (Bransford et. al., 2005; Villegas-Reimers, 2003; González & Wagenaar, 2005).

(9) Competencies that include respect for cultural traditions and values (interculturalism and education for democratic citizenship) (Darling-Hammond & Bransford, 2005; TKCOM, 2018).

The conducted analysis determined whether the key teacher competencies are developed through the obligatory part of the programmes for acquiring key pedagogical competencies at five Croatian Universities, or are they acquired only under the condition that the enrollees took up certain elective courses as well.

#### **FINDINGS AND DISCUSSION**

Using quantitative and qualitative method of content analysis based on the analysis criteria pertaining to selected key teacher pedagogical competencies, it was established which programmes and to what extent, through learning outcomes, result in the acquisition of key teacher pedagogical competencies at five universities in Croatia.

The results of the analysis are presented in tables and graphs.



Table 1

Overview of the number of learning outcomes of compulsory courses that lead to the development of pedagogical competencies within the lifelong learning programme at five separate Universities in the Republic of Croatia<sup>6</sup>

University/ Pedagogical Competencies- Compulsory courses	Faculty of Humanities and Social Sciences University of Osijek		Faculty of Humanities and Social Sciences University of Rijeka		Faculty of Humanities and Social Sciences University of Split		Juraj Dobrila University of Pula		Faculty of Teacher Education of University of Zagreb	
	f	%	f	%	f	%	f	%	F	%
1	25	53.19	59	72.83	19	52.78	19	52.78	29	46.03
2	16	34.04	7	8.64	2	5.55	5	13.88	14	22.23
3	0	0	4	4.94	1	2.78	0	0	1	1.58
4	0	0	1	1.24	0	0	7	19.45	4	6.35
5	5	10.64	4	4.94	7	19.45	2	5.55	4	6.35
6	1	2.13	4	4.94	2	5.55	1	2.78	3	4.76
7	0	0	0	0	0	0	0	0	3	4.76
8	0	0	2	2.47	5	13.89	1	2.78	5	7.94
9	0	0	0	0	0	0	1	2.78	0	0
Total	47	100	81	100	36	100	36	100	63	100

<sup>6</sup> Competence key (refers to Tables 1 and 2 and Figures 1 and 2):

- (1) Competencies related to the course curriculum, basic legislation related to the process of education and knowledge related to pedagogical theories necessary for understanding educational activities.
- (2) Competencies that include planning, preparing, organizing, and conducting the teaching process.
- (3) Competencies related to good communication skills.
- (4) Competencies involving collaboration with students, colleagues, and parents.
- (5) Competencies related to the selection and use of different teaching methods, strategies, forms, and information and communication technology.
- (6) Competencies related to the process of evaluation and assessment of student achievement and self-evaluation.
- (7) Competencies related to the creation of a stimulating classroom environment and discipline, and stress management in teaching.
- (8) Competencies related to respecting and integrating students of different abilities.
- (9) Competencies that include respecting cultural traditions and values (intercultural and education for democratic citizenship).

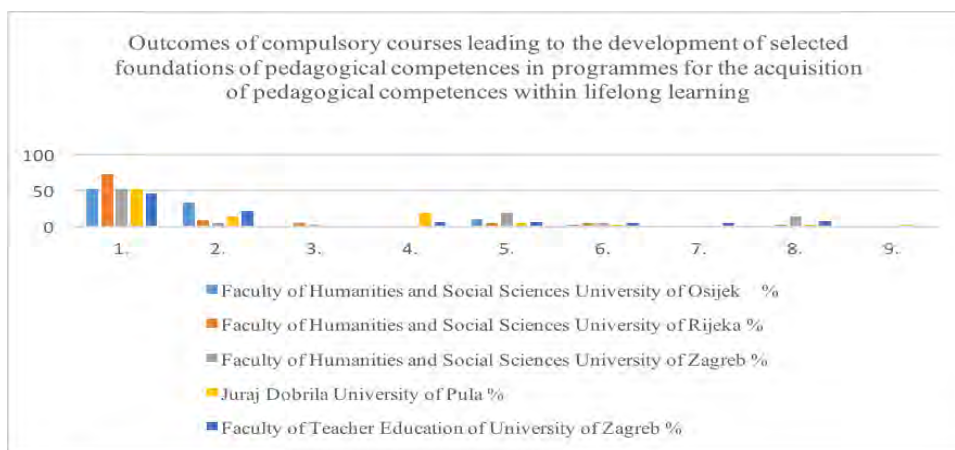


Figure 1

Outcomes of compulsory courses leading to the development of selected key pedagogical competencies in programmes for the acquisition of pedagogical competencies within lifelong learning

Table 2

Overview of the number of learning outcomes of elective courses that resulted in the development of pedagogical competencies within the lifelong learning programme at five separate Universities in the Republic of Croatia

University/ Pedagogical Competencies- Elective courses	Faculty of Humanities and Social Sciences University of Osijek		Faculty of Humanities and Social Sciences University of Rijeka		Faculty of Humanities and Social Sciences University of Split		Juraj Dobrila University of Pula		Faculty of Teacher Education of University of Zagreb	
	f	%	f	%	f	%	f	%	f	%
1	17	36.17	70	76.92	21	65.62	35	76.09	19	50
2	4	8.52	5	5.49	2	6.25	1	2.17	1	2.63
3	1	2.13	2	2.2	0	0	3	6.53	1	2.63
4	2	4.25	3	3.3	2	6.25	0	0	1	2.63
5	7	14.9	1	1.1	2	6.25	2	4.35	4	10.53
6	3	6.38	6	6.59	1	3.13	0	0	4	10.53
7	8	17.02	0	0	1	3.13	0	0	5	13.15
8	2	4.25	3	3.3	0	0	4	8.69	3	7.9
9	3	6.38	1	1.1	3	9.37	1	2.17	0	0
Total	47	100	91	100	32	100	46	100	38	100

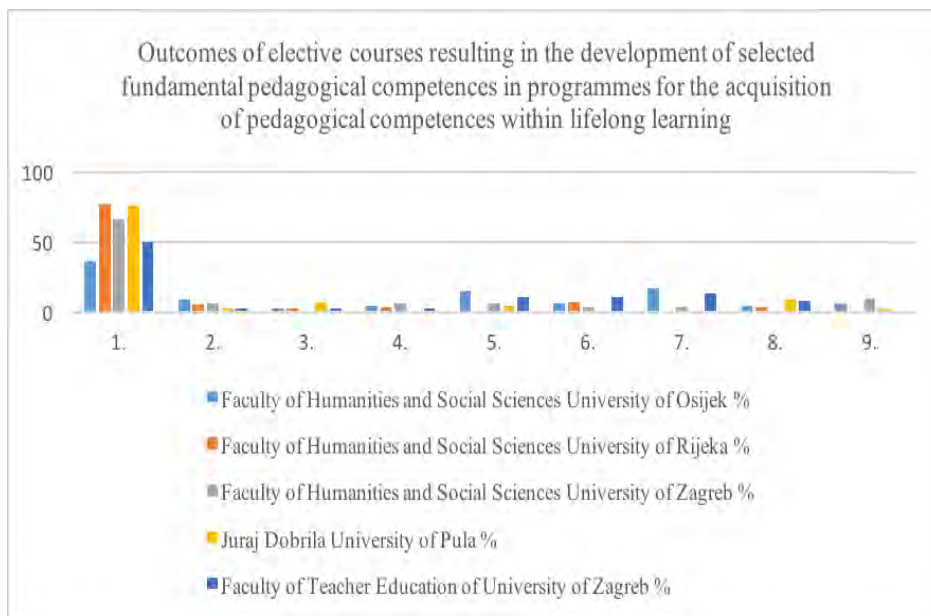


Figure 2

Outcomes of elective courses leading to the development of selected key pedagogical competencies in programmes for the acquisition of pedagogical competencies within lifelong learning

As illustrated in the Table 1 and 2 as well as in Figure 1 and 2 of both the compulsory and the elective courses, the learning outcomes in all five programmes have the emphasis on acquiring competence related to the course curriculum, basic legislation regarding the process of education and knowledge related to PPDM theories necessary for understanding educational activities. It is indisputable that prowess in the theoretical aspects is a prerequisite for quality educational activities. However, of the total number of learning outcomes in compulsory courses in all the programmes analysed, more than 50% of outcomes concern the adoption of basic theoretical tenets of the teaching and learning process, which leaves very little room for the development of other key pedagogical competencies of future teachers. Concerning one particular competence in particular, i.e. knowledge of the body of legislation applicable for the teaching and learning process, which was singled out as of primary importance, it was stated that the enrolees in the programmes for the acquisition of pedagogical competencies need to receive information that forms the legal base in education. And yet, that part was omitted. Thus, learning outcomes concerning the competence in the course matter, i.e. basic legislation applicable to the process of education and knowledge of PPDM theories necessary for understanding educational activities, all the analysed programmes were mostly reduced to knowledge, understanding and adoption of basic theoretical basis of the course, omitting the legal regulations important for the regulation of educational work.

The competence in the planning, preparation, organization and management of the teaching process, which is the next most represented in the programmes, is adopted through the outcomes of compulsory courses in the programme of the Faculty of Humanities and Social Sciences University of Osijek (34.04%), Faculty of Teacher Education of University of Zagreb (22.22 %) and the Juraj Dobrila University of Pula (13.88%), in contrast to the programmes at the Faculty of Humanities and Social Sciences University of Rijeka and Faculty of Humanities and Social Sciences University of Split where it is not as present. For the most part, the learning outcomes result in the development of this competence are found in courses related to methodologies or school practice. In the elective part of the programme, the competence related to the planning, preparation, organization and management of the teaching process is found in every programme in a low percentage when compared to the total number of analysed outcomes of elective courses in each programme.

Communication skills, being one of the key competencies of teachers, are not found in the compulsory part of the programme at the Juraj Dobrila University of Pula and at the Faculty of Humanities and Social Sciences University of Osijek, while in other analysed programmes it is found in a very low percentage. The lack of development of communication competencies was compensated through the outcomes of elective courses in all the programmes that were included in the analysis, except in the programme conducted by the Faculty of Humanities and Social Sciences University of Split. It should be noted that the development of this competence is usually associated with a specific course that aims to develop this competence, such as Psychology of Communication or Communication Skills, while the development of this competence is not found in other courses. Consequently, we believe that it cannot be stated with any degree of certainty that this particular pedagogical competence is being realized, since the students would have to enrol *en masse* in those elective courses that enable them to gain that particular competence.

Competence related to cooperation with students, colleagues and parents is a competence that is compulsory in the programme of the Juraj Dobrila University of Pula, the Faculty of Teacher Education of University of Zagreb and the Faculty of Humanities and Social Sciences University of Rijeka. Juraj Dobrila University of Pula is leading in this particular competence with as much as 19.44% of the analysed learning outcomes of compulsory courses dedicated to the development of this competence, while enrollees in the Faculty of Humanities and Social Sciences University of Osijek and Faculty of Humanities and Social Sciences University of Split will not have the opportunity to develop this competence within the compulsory part of the programme.

The competence to select and use different teaching methods, strategies, forms, and the use of information and communication technology was recognized as important in all analysed programmes. Thus, in a very high percentage, this competence is represented in compulsory, but also in elective courses in all analysed programmes. This competence is most often found in Didactics and Methodology courses, as well as in courses related to the application of technology in teaching. In compulsory courses, the largest number of learning outcomes that allow the enrollees to gain the mentioned

competence is found in the programme of the Faculty of Humanities and Social Sciences University of Split (19.44%) while the largest percentage of learning outcomes related to the competence of choosing and using different teaching methods, strategies, forms, and use of information and communication technologies are found in the programme of the Faculty of Humanities and Social Sciences University of Osijek (14.89%).

Another competence found in the compulsory and elective part of the programmes is the competence related to the process of evaluation and self-evaluation, and its development is offered through all analysed programmes, except for the elective part of the programme of the Juraj Dobrila University of Pula. Most often, the learning outcomes related to the mentioned competence are part of the courses dealing with the process of evaluation and self-evaluation or to the Didactics and Methodology courses, but it is important to point out that in most programmes the mentioned competence is developed in the elective part of the programme. Thus, for example, at the Faculty of Teacher Education of University of Zagreb, the competence of evaluation and self-evaluation can be found in 10.52% of the learning outcomes of the elective part of the programme.

Creating a stimulating classroom environment and discipline and stress management in teaching is a competence that is developed by the programme of the Faculty of Teacher Education of University of Zagreb in the compulsory and elective part, while at the Faculty of Humanities and Social Sciences University of Osijek there are courses in the elective part that deal almost exclusively with the development of such competence, such as Teaching Stress and Positive Discipline courses. On the other hand, the programmes at the Faculty of Humanities and Social Sciences University of Rijeka and the Juraj Dobrila University of Pula do not develop the mentioned competence.

The development of competence related to the appreciation and integration of students of different abilities can be acquired in the compulsory part of all analysed programmes except for the Faculty of Humanities and Social Sciences University of Osijek, where this competence is developed in the elective part of the programme. Faculty of Humanities and Social Sciences University of Split pays the greatest attention to the development of competencies related to respect and integration of students of different abilities, and through its compulsory part of the programme defines a high 13.88% of the learning outcomes which lead to the development of the mentioned competence.

The last of the selected key pedagogical competencies is the one concerning the respect for cultural traditions and values (interculturalism and education for democratic citizenship). This competence is found in the compulsory part of the programme only at the Juraj Dobrila University of Pula, with only 2.77% of the total number of learning outcomes. A slightly higher percentage of this particular learning outcome is found in the elective part of the analysed programmes. Thus, at the Faculty of Humanities and Social Sciences University of Split, 9.37% of learning outcomes in the elective part of the programme are related to the development of competence that includes respect for cultural traditions and values, while the development of the same competence is not found in the programme of the Faculty of Teacher Education of University of Zagreb.

The conducted analysis showed that the programmes for the acquisition of pedagogical competencies in the framework of lifelong learning are mainly focused on the acquisition of knowledge of students related to certain pedagogical theoretical basis. If we adopt the definition of competency as the ability to act in accordance to the level of acquired knowledge (Eraut, 2009; Schneider, 2019; Woodruffe, 1993) we believe that pedagogical competencies of future teachers should be focused on the level of practical application of professional and basic pedagogical knowledge and skills (Ismail et.al, 2019, 506; Sharples, 2019; Arnold, Mundy, 2020; Shalem & Slonimsky, 2014; Zimmerman Nilsson, 2017). Since other selected pedagogical competencies rely on practical application, and in learning outcomes they are represented mainly in a much smaller percentage than the mentioned competence related to the acquisition of pedagogical theoretical basis, we can conclude that programmes for the acquisition of pedagogical competencies in lifelong learning neglect the development of practical skills necessary for the future teaching profession.

Another issue that has been identified through the analysis of the learning outcomes of compulsory and elective courses is that no programme with its compulsory part ensures the acquisition of the necessary key competencies but seeks to provide them with the elective part of the programme. Acquisition of key pedagogical competencies should not be left to the volition of students who may or may not enrol in certain elective courses, and their independent assessment of the selection of competencies upon completion of the programme. Indeed, the compulsory part needs to be designed to ensure that all the necessary competencies are acquired, while the elective part of the syllabus should be there just to enhance the compulsory part.

These results indicate the need to design and set up a single harmonized programme on the level of the Republic of Croatia that would ensure the acquisition of key pedagogical competencies for participants in programmes for the acquisition of pedagogical competencies in lifelong learning.

## **CONCLUSION**

The analysis of the learning outcomes of compulsory and elective courses of selected programmes for acquiring pedagogical competencies offered through lifelong learning programmes in the Republic of Croatia found that participants do not acquire all key pedagogical competencies through compulsory courses after completing the programme for acquiring pedagogical competencies, and their acquisition is mainly offered through elective courses that they may or may not enrol in.

In the analysed programmes, the electiveness offered is desirable, but only in the context of supplementing the compulsory part of the programme, and not as an education avenue that provides acquisition of most important concepts. The research showed that the participants were given ample leeway to complete their respective selected education programmes without acquiring some of the key pedagogical competencies, which is unacceptable in the light of their future profession.

The analysis of learning outcomes of compulsory and elective courses of programmes for acquiring pedagogical competencies within lifelong learning in Republic of Croatia

also indicated the lack of certain learning outcomes through which the necessary key pedagogical competencies would be built, such as: education for interculturalism, curriculum development and test construction, legal bases in educational process and pedagogical documentation, research (scientific and practical), quality assurance in education, work ethic, educational policies, distance education, etc.

Since the research indicates how the scope and quality of pedagogical competencies vary from programme to programme in Republic of Croatia, it would be necessary to devise a clearly defined national syllabus that would ensure the acquisition of key teacher competencies. These competencies must be included in compulsory part of the programmes leaving no space for not achieving key pedagogical competencies necessary for working in educational institutions.

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