Initial Teacher Education: Appropriate Models for a Knowledge Society?

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Abstract:

 Teacher education and professional development of teachers are a crucial issue for any country, since the quality of the teaching staff is one of the main factors influencing the level of students' academic achievements. The conditions in which teachers work today are drastically different from the ones of the early 20th century, whereas the structure and organization of initial teacher education has not changed significantly. Although the course content, the duration of study, and learning and teaching strategies have changed, the main teacher training models, regardless of the differences between them, still include course content related to individual professions, course content from pedagogy and psychology, didactic and methodology training, and in-service teacher training. This paper analyses initial teacher education models with regard to the presence of the said elements and the manner in which they are distributed in the structure and organization of the study programme. On the basis of a conducted analysis, the authors conclude that there is not a single initial teacher education model which proposes a paradigm shift that would yield more successful results in comparison with other models in the preparation of teachers for work in a postmodern era. To navigate the complex social requirements, the most suitable initial teacher education model is the one which integrates different types of knowledge and skills, and produces teachers who are capable of research and reflection – a model which would allow teachers to become critical intellectuals capable of acting autonomously and competently.

Keywords: teacher, teacher education models, initial teacher education, structure, organization, study programmes

Introduction

Education and professional development of teachers[1], their initial education and training in particular, are a crucial issue for the education policy of any country which strives to raise the level of quality of its education system and make it more accessible and flexible. One of the main factors for the improvement of an education system is the quality of the teaching staff, which largely affects the level of students' academic achievements. Therefore, teachers' competences should be the main focus of education policies at all levels of formal and informal education, both in our country and globally (Diković, Piršl, 2014: 226).

It is a known fact that the efforts to identify structural and organizational requirements of a successful teacher education programme and to define the knowledge and skills which a teacher requires have been ongoing since the late 19th century, when the level, structure and duration of teacher education studies gradually started to change (Babić, Irović, Kuzma, 1999; Strugar, 1999; Vizek Vidović, 2005; Hrvatić, Piršl, 2007). However, in the past three decades, there have been very intense debates on the concept of teacher education throughout Europe (Domović, 2009: 12), which is indicative of a deeper understanding of the importance of a professional training for teachers in accordance with the challenges posed by the postmodern society. The era of intense and sudden changes created a need for more frequent revisions of curricula than was previously the case. However, such revisions are usually perceived as mere modifications of the programme structure, limited to course content and training objectives, dynamics of achieving the said objectives, and assessment of the achieved results, accompanied by innovations of teaching methods and didactic tools and the change of focus of the education

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[1] In this paper, the plural form "teachers" is used instead of the singular, as it encompasses both male and female teachers.

process from teaching to learning, etc. All that, however, is not sufficient with regard to complex changes affecting the modern world, as well as Croatia. The complexity of the modern society forces all professions to face insecurity, unpredictability, risk and value conflict, which cannot be tackled by applying predefined behaviour patterns (Korthagen et al., 2001: 2-5; Schön, 1987, 2006: 31-32; Mortari, 2011: 25; Montalbetti, 2005: 50). Therefore, modern age requires not only a curricular change, but also a paradigm shift in initial teacher education (Morin, 2001: 41; Baldacci, 2009: 9-10), i.e. an overall revision of the structure and organization of teacher education studies. This implies building an extensive foundation of scientifically grounded insights on learning, teaching and research methodology, as well as empirically tested procedures which foster the learning process and high-quality use of teaching strategies, as well as the ability to reflect on personal experience and generalize and expand the acquired knowledge and insights.

One of the crucial issues of both Croatian and European education systems are the initial teacher competences. When we speak of teacher competences, it is important to define which are the key competences, since they can vary from rather broad, general competences to narrow, specific and professional ones. It is precisely because of this that the Council of Europe and the European Commission decided to define key competences as one of the most important priorities of the 21st century in which teachers will play (or already play) a crucial role in preparing students to become future European citizens and in training them for an active participation in the modern-day democratic and pluralistic society. Therefore, key competences in teacher education[1] are one of the crucial issues of the majority of European strategic documents and projects (Piršl, 2014).

The introduction of the Bologna process in both national and international education systems gave rise to certain issues, some of which are still being discussed. They are the following: Have the key competences of future teachers been redefined, and to which extent? To what extent are the key skills and knowledge from pedagogy-, psychology-, didactics- and methodology-related disciplines and professional practice present in the initial teacher education curriculum? Have theoretical and practical courses been successfully integrated and implemented in initial teacher education and training, with an appropriate balance between academic and pedagogical/psychological course content on the one side, and methodology practicum and in-service training on the other, which alternate cyclically? Which competences should be developed in future teachers? Does the initial teacher education also include the European dimension, which is reflected in teachers' readiness and competence to face new challenges?

This paper analyses initial teacher education models with regard to the presence of various elements: academic and pedagogical/psychological course content; methodology practicum and in-service training; and manners in which they are distributed in the structure and organisation of the study programme. On the basis of a conducted analysis, the authors conclude that not a single initial teacher training model proposes a paradigm shift which would yield more successful results in comparison with others in the preparation of teachers for work in the postmodern age.

Overview of the dominant initial teacher education models

From the first organised forms of teacher education until today, there has been an ongoing search for the ideal initial teacher education model which would be characterised by an optimal balance between theory and practice and their mutual dependence and connection. By observing various overviews of the dominant models of initial teacher education and training, one can often notice that certain authors have a decidedly one-sided perspective, emphasizing only theoretical or only practical aspects. Such an approach results in overemphasised dominance of either theory or practice in teacher education, which compromises their integration and balance. Namely, if teacher education is based on a single dimension, i.e. solely on the acquisition of scientific insights and theories, thereby neglecting the acquisition of pedagogical/psychological skills and vice versa, it will be insufficient for an effective and high-quality performance of teaching professionals and for a better understanding of students, their needs, learning abilities and motivation to study.

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[1] Documents relating to European education policies with an emphasis on teachers' competences: Education and Training 2010 (2008) – key competences and qualifications for a successful performance of teaching professionals; Improving the Quality of Teacher Education (2007) – quality of teacher education as the crucial factor for the improvement of students' academic achievements; Tuning educational structures in Europe: Summary of Outcomes – Education (2005) – programe for converging educational structures in Europe (especially competences and learning outcomes within various fields of education); Teacher Education in Europe: An ETUCE Policy Paper (2008) – competences which teacher education studies need to develop in future teaching professionals.

The following is an overview of some of the dominant models of initial teacher education by both foreign and local authors, which advocate either the theoretical or the practical aspect of teacher education and consequently emphasize not only the importance and presence of their constituent elements (profession-related coutrse content, pedagogical/psychological course content, didactic/methodology training, in-service training), but also the manner in which they are distributed within the structure and organization of teacher education studies.

Zeichner (1983) identifies four teacher education models. According to him, the first, behavioural model emphasizes the importance of developing specific methodical skills which are put in correlation with effective learning as the consequence of a high-quality teaching. The second model emphasizes the importance of teachers' personal development which is focused on developing stable characteristics of their identity in the course of academic training. Those are charateristics which allow everyone, regardless of their profession, to recognize their own uniqueness and continuity in all stages of life, regardless of age and experiences they lived. Although certain aspects of personality are inherent, each person changes in the course of their education and under the influence of their experience, as identity is not set in stone. In this regard, the purpose of education (*Bildung*) is to steer future teachers towards spiritual development in interaction with others, resulting in a transformation and achieving a new educational synthesis. The third model is labelled as traditional by the author, and it compares teacher education with the process of apprenticeship. According to Zeichner (1983), the fourth teacher education model is focused on research and the priority is given to research in the field of education and various other contexts in which education takes place.

According to Slovenian authors Valenčić-Zuljan and Vogrinc (2012: 113-115), teacher education can be studied from the viewpoint of the traditional or apprenticeship model, behavioural model, knowledge-based model with academic focus, and cognitive/constructivist model. The apprenticeship model focuses on the experienced teacher whom students observe and emulate during practical exercizes. The emulation is largely non-critical, i.e. it is not based on an analysis of basic elements of teaching by means of the acquired pedagogical and didactic theories. The role of theory has been reduced to a minimum, while the priority is given to all practical forms of education. According to the said authors (Valenčić-Zuljan, Vogrinc, 2012), the behavioural model, which was dominant between 1965 and 1980, is characterized by a close connection between the teacher's performance and the students' achievements. Learning results were considered to depend on teaching characteristics, and research into this area has served as the basis for the development of the necessary competences for a successful teaching and training of students (future teachers), in specific methology procedures and techniques. In the course of the methodology practicum and in-service training, students have the duty to apply theoretical knowledge so as to correlate as much as possible their practical exercizes with the knowledge acquired at the faculty. The academic focus model is concerned with the education of teachers as rational and autonomous experts who primarily need to acquire sufficient theoretical knowledge of the profession they are going to teach, as well as pedagogical and psychological knowledge regarding students, planning and programming, teaching and learning methods, knowledge evaluation systems, etc. The teachers should apply the acquired knowledge in their teaching practice. The emphasis is placed on academic education, while practical forms of teaching are neglected and time-constrained. The cognitive-constructivist model is focused on teachers' and students' cognitive processes, which occur between the stimulus and the reaction and which are crucial for human behaviour. In this model, the authors give equal importance to a thorough academic and pedagogic knowledge and to the in-service teacher training which focuses on a critical observation and interpretation of pedagogical phenomena and students' active role in the interpretation and application of the observed skills of experienced teachers. The main purpose of this model is to train future teachers to reflect on their own and other people's personal experience, in order to better understand and improve their own teaching practice.

Vizek Vidović et al. (2011: 62), Striano (2001: 138), Korthagen et al. (2001: 1-5) distinguish between deductive or rationalist/technocratic models, inductive models, and integrated teacher education models.

The curriculum for the preparation and training of future teachers which is based on rationalist/technocratic model is characterized by an obvious gap between the acquisition of theoretical knowledge and development of practical skills. Students receive fragmented knowledge, partly because of numerous courses and because of the manner in which practical experience is organized, and the knowledge acquired at the university is factual and often non-critical. Furthermore, acquisition of knowledge from psychology, pedagogy, didactics, course methodologies and their corresponding underlying sciences is dominant both in terms of course content and time devoted to it, in comparison with the practical application of teaching skills which takes place during methodology practicum and in-service training. The rationalist/technocratic model (Hoyle, 1980, according to Korthagen et al., 2001: 3) is characterized by three main postulates:

theories help teachers perform more successfully;

theories need to be based on scientific research;

university professors are the ones who should select the theories to be included in the curricula for teachers.

Therefore, in-service teacher training is seen only as an opportunity to apply theoretical knowledge, without relying on the learning-from-experience principle (Carlson, 1999, Korthagen, Longhran, Russell, 2006 according to Grion, 2006). By separating theory and practice, a gap is created between knowledge provided in a higher education institution and the knowledge required in the classroom. A perpetual problem of the rationalist/technocratic approach to teacher education is the inability of beginners to apply theoretical knowledge acquired at the faculty in their teaching practice, i.e. in the classroom. According to Zeichner and Tabachnik (1981), the reasons for that should partially be sought in the fact that the concepts acquired during initial teacher education tend to be "washed out", i.e. in insufficient integration of theory and practice in the course of training of future teachers, because most students believe that pedagogical theories are not essential for the development of teaching competences (Laursen, 2007).

Zeichner and Gore (1990, according to Korthagen et al., 2001: 4) claim that the introduction of innovations in teaching remains, in most cases, the unattainable ideal of university teachers. The insufficient transfer of theory into practice is largely caused by the resistance among older teachers towards changing their teaching habits, but also by an inability to deal with individual cases by simply applying "ready-made solutions" from the pedagogical theory. Research conducted by the above-mentioned authors confirms that it is unreasonable to expect from students to be able to apply the acquired theoretical knowledge in their professional work, thus overcoming the gap between theory and practice, without a timely and effective intervention into the training of young generations of teachers which would allow the reflection on and theoretical analysis of their teaching experience.

Dissatisfaction with the amount of practical courses in initial teacher education has resulted in various measures to rectify the situation. Great Britain, England and Wales have introduced a teacher education model according to which schools themselves are largely responsible for training future teachers. It is an induction model in which a considerable portion of education takes place in schools, while only a smaller number of classes is dedicated to the acquisition of theoretical knowledge at the faculty (Korthagen et al., 2001: 11; Vizek Vidović et al., 2011: 62). In this British model, students spend two thirds of their courses in schools (Hargreaves, 2000, according to Buchberger, 2005: 203), which means that the education of future teachers is based on apprenticeship, i.e. on emulating an experienced teacher-mentor (Vizek Vidović et al., 2011: 62, Buchberger, 2005: 203). The apprenticeship model harbours a great risk: aversion towards theoretical thinking and abstraction due to an absolute reliance on practical experience. Evaluation of this model has shown that it, too, is not the right solution, because it can lead to a mechanical imitation of a more experienced teacher, which hinders the generalization of experience and application of the acquired knowledge onto new situations and educational problems, and reduces the willingness to introduce innovations (Tigchelaar, Korthagen, 2004: 666, Vizek Vidović et al., 2011: 62).

On the basis of a comprehensive research conducted in the Netherlands, Brouwer (1989, according to Korthagen et al., 2001: 4; Brouwer, Korthagen, 2005) concluded that the application of an integrated model in teacher education curriculum, in which theory and practice are alternated and integrated, is immensely important for the development of abilities to translate the acquired knowledge into practice. According to Vizek Vidović (2005: 293), the integrated model implies that the acquisition of academic knowledge should be fused with analysis from the viewpoint of the educational sciences on how curriculum should be taught in an appropriate manner to various age groups and to students with different abilities. Furthermore, this model entails training which will allow students to reflect on experience by means of theoretical insights, as well as to transfer general knowledge from the situations they experienced onto new circumstances.

On the basis of the analysis of exemplary teacher education programmes in the USA, Darling Hammond, Bransford et al. (2005: 392) claim that one of their most prominent characteristics is a good degree of integration and coherence, i.e. strong links between practical work and pedagogical theory. The fundamental ideas of such programmes are further strengthened by means of reflection in order to allow a better and deeper understanding of the learning and teaching process. The above-mentioned empirical studies have proved that a teacher education which is characterized by a coherent vision of learning and teaching and a good degree of integration of theoretical education and in-service training can exert a stronger influence on the introduction of innovations in the teaching practice of beginning teachers than one which is not.

In France, the introduction of mass education and the placement of the student at the centre of pedagogical processes has spurred research on the perception of the role of the teacher. Research has shown that teachers' professional identity has changed, and they are no longer seen only as the masters of their own specific profession, but also as experts in learning and teaching (Altet et al., 2006: 31). Numerous research studies have been developed within the Centre for Research in Education of the University of Nantes, whose goal is to define various models for initial and lifelong teacher education. Basing their work on the said research, French scholars Paquay and Wagner, 2006 (in Altet et al. 2006: 150) identified six concepts of teaching, which correspond not only to specific "typology" of teachers, but to specific initial education models as well. They are the following:

1. The teacher as a knowledgeable expert – the one who has mastered academic knowledge and can apply didactic procedures and principles acquired in theoretical courses;

2. The teacher as a skillful expert – systematically develops practical competences and participates in numerous methodological exercizes aimed at automating teaching skills and abilities;

3. The teacher as a classroom actor – adopts professional behaviour patterns in the course of the teaching practice by learning from an experienced teacher-mentor, with a rather brief theoretical training;

4. The teacher as a reflective agent – autonomously builds experiential knowledge which is systematically linked with theory, thus developing the ability to reflect, which is necessary for the analysis and evaluation of practical teaching procedures and implementation of research projects for the purpose of improving classroom teaching;

5. The teacher as a social agent – is involved in collective projects (often of innovative character) and aware of the importance of social links with a broader social community;

6. The teacher as a lifelong learner – an individual who is continuously working on his/her professional development, aware of his/her own professional style and open towards dynamic changes and continuous personal development.

Each concept of teaching entails different objectives and strategies in the course of initial education, as well as differences with regard to: a) importance and duration of in-service training, b) timing of in-service training during teacher education studies, c) privileged pedagogical objectives and learning outcomes, d) privileged teaching strategies and activities, e) manners of monitoring and supervising students' work, f) manners of integrating theory with practice (Altet et al. 2006: 160).

When studying the concept of teacher education, we should analyze not only the courses which are theoretical in nature and the organization of in-service training during studies, but also all specific forms of practical work (e.g. teaching methodology practicum, classroom simulations, extra-class activities, microteaching, autonomous classroom teaching over a longer period of time, etc.), students' ability to apply the regular patterns of preparation and implementation of classroom teaching, and especially the ability to reflect on and create innovative methodologies focused on research, with a high level of creativity. However, asking students to critically reflect on their own teaching experience can lead to the use of stereotypical algorithms without a more comprehensive analysis, which is why an essential aim of teacher education curricula is to gradually develop the ability to reflect and to integrate theoretical insights and practical experience. Namely, systematic reflection on the teaching practice has numerous advantages for the development of the professional identity of teachers: it helps teachers gain a better insight into their personality, it allows critical distance and strengthens the control over one's own educational procedures, it activates the experiential learning process, fosters a deeper understanding of scientific and technical basis of the teaching practice, increases the sense of pedagogical, ethical and political responsibility, helps raise awareness about the beliefs, needs, objectives, intentions and emotions which accompany and steer the teaching practice, and encourages openness, flexibility and readiness to change.

Initial teacher education in Croatia is still dominated by the technical rational model, although numerous studies have proved its poor influence on beginners' practical performance (Laneve, 2009: 23; Schön, 2006: 18; Damiano, 2007: 38-39; Palekčić, 1998: 406). This is a model which assumes that the most economical path towards acquiring professional competence is the one in which the acquisition of theoretical knowledge about learning and teaching occurs at university, whereas the teaching skills are practiced and the acquired knowledge is applied in schools (Darling-Hammond, Bransford, 2005: 391-392; Laneve, 2009: 23; Korthagen et al., 2001: 3; Vizek Vidović et al., 2011: 62). Within this model, the curriculum for future teachers encompasses academic education, pedagogical/psychological and didactic/methodical training, and in-service teacher training. Basic or general education of teachers of lower grades of primary school encompasses the

acquisition of academic knowledge of natural and social sciences, arts, technical sciences, philosophy, communication, IT, etc. Pedagogical/psychological and didactic/methodical training implies acquisition of knowledge and development of skills from pedagogy, developmental and educational psychology, didactics and methodology of individual subjects. In-service teacher training takes place in schools-training centres for the purpose of acquiring practical teaching skills and abilities.

Within the technical rational model, and with regard to the time schedule for the acquisition of academic knowledge, knowledge of educational sciences, methodological skills and classroom practice, we can distinguish between simultaneous, successive and integrated approach. The simultaneous approach implies acquisition of academic knowledge and educational sciences from the first year of studies, but as two relatively autonomous course contents (Vizek Vidović, 2005: 293). The successive approach refers to a training in specific subjects which is followed by pedagogical/psychological and methodology training (Strugar, 1999), while the integrated approach refers to the acquisition of academic knowledge which occurs simultaneously with methodical analysis of the manners of teaching the specific course content to different age groups. However, although the integrated approach combines various didactic models and theories, stimulates the development of pedagogical competences, introduces paradigm shift and a new learning culture focused on practical performance, we should not neglect the fact that although "integrative didactics, often referred to by different names, has its place in the development of curricula and pedagogical competences, ...[integrated] approaches are not sufficiently explored, evaluated and documented" (Buljubašić-Kuzmanović, 2014: 96), and are therefore also not applied in teachers' university education.

Critical considerations on the dominant teacher education models

On the basis of the analysis of the dominant models of initial teacher education, it can be concluded that an excessively theoretical focus of rational technical teacher education programmes, their insufficient integration with practice, fragmented and incoherent courses, and a lack of a clear common concept of teaching, were the topic of numerous teacher education research studies conducted in 1980's. (Darling Hammond, Bransford et al., 2005: 391; Vizek Vidović, 2011: 67; Brouwer, Korthagen, 2005; Striano, 2001). This is further supported by numerous surveys and assessments of students and teachers. Thus, Schaefers, 2002 (according to Palekčić, 2008: 404) identifies the following disadvantages of initial teacher education:

- insufficient links with practice;

- insufficient integration of different parts of the course content;

- insufficient focus on the development of social competences;

- inadequate balance between various subject-related sciences and professional competences;

- insufficient training in course methodology and insufficient inclusion of methodologies in research;

- insufficient transparency of requirements;

- large number of individual disciplines included in the system;

- lack of actual practical work in schools.

Other authors as well have identified numerous disadvantages of the traditional initial teacher education curriculum: isolated course content from numerous scientific disciplines; memorizing and reproducing abstract academic knowledge with insufficient links with reality and professional training (Darling-Hammond, Bransford, 2005; Brouwer, Korthagen, 2005; Korthagen, Loughran, Russell, 2006, Matijević, 2009). Teacher education is also criticized for being excessively structured, normative and focused on teaching, mostly in the cognitive area, which produces passive and receptive students/future teachers. Technical training and scientific education may have been acceptable during the modern era, but it cannot serve as the basis for the work of teachers in the postmodern age. It was only in the 1990's, after the publication of Schön's (1983) book on the reflective practitioner, that it became increasingly obvious that technical and scientific competence are not sufficient to manage the complexity of a profession, which in turn lead to a crisis of professions and traditional profession-related education. Therefore, an issue which can be encountered in all debates, reports and research studies on initial teacher education is the need to establish a balance between theoretical knowledge in academic disciplines and education sciences themselves, and to develop practical professional skills (Pastuović, 1999: 493; Vizek Vidović, 2005:

193; Domović, 2009: 12; Darling-Hammond, Bransford, 2005). In other words, there can be no improvement of the formal teacher education without integration of theoretical knowledge derived from research on educational sciences with the results of analysing the teaching practice by training teachers to reflect and integrate experience and theoretical knowledge (Calvani, 2009; Korthagen et al., 2001; Mortari, 2003; Montalbetti, 2005; Striano, 2001; Brouwer, Korthagen, 2005). There have been attempts to bridge the gap between the acquisition of theoretical knowledge and the development of practical skills by introducing a competence-based curriculum. The concept of competence indirectly solves the problem of integration of practical and theoretical aspects of education because professional competence is developed by means of reflection on the experience acquired through interaction with others and it fuses knowledge and skills for the purpose of solving problems in the learning and teaching process. However, there is no generally accepted theoretical framework for the selection of methodology and use of competences in planning and implementation of curricula for the development of professional competences, which hinders progress in professional training at the university. Namely, while some authors (Korthagen et al., 2001: 2; Striano, 2001: 79) believe that Competency Based Teacher Education (CBTE) should also be grouped under rationalist/technocratic models, other authors believe that the pedagogical approach which advocates the introduction of competence-based curricula is not behaviourism, but social constructivism. In this case, competence-based curricula represent the biggest ever challenge that university teachers and teachers in general have to face, as it makes their task extremely complex: to manage educational situations so as to allow students to autonomously build knowledge and develop professional skills. Therefore, the most appropriate initial teacher education model is the one which trains teachers to reflect and do research. The teacher-researcher and reflective practitioner models recognize the importance of a continuous learning process in which reflection and research skills are of utmost importance, as they strengthen autonomous and responsible professional performance. Such professional performance is reflected in the ability to integrate different types of knowledge and skills when facing difficulties and unpredictable situations in a specific educational context. In the complex working conditions of the modern-day society, teachers are required to do more than simply implement the existing teaching techniques, methods or procedures; they need to be able to think pedagogically, reflect on problems and research them, analyse students' behaviour and learning results, prepare syllabi for students with different abilities, and perform other unpredictable tasks.

However, in reality, the ideal and the realistic university education often diverge. The need to produce an emancipated and creative teacher who is capable of doing research and introducing innovations in the school system clashes with the still dominant traditional and conservative forms of higher education teaching and the current education system, which is often anchored in outdated thought and behaviour patterns (Bognar, B., Bognar, L., 2007; Vrcelj, Mušanović, 2003, Matijević, 2011). Most teacher education study programmes are still more focused on transferring and replicating knowledge than on providing learning opportunities in real-life contexts, evaluating achievements through conrete activities, and reflection and research aimed at improving the teaching process.

Despite their proclaimed autonomy, teacher education institutions have to adhere to various national standards and international recommendations and guidelines in order to ensure the acquisition of comparable competences which are required for employment (Domović, 2009: 28). In Croatia, there have been efforts to define professional standards for the teaching profession based on the European Qualifications Framework. Convergence of education systems within the European Union is a tendency towards standardization of competences, which can compromise flexibility of initial teacher education and hinder the development of the teaching profession. In other words, there is a risk of neo-bureaucratization of professional training of teachers in the context of new trends which require a strong focus on the student and give priority to the development of realistic personal competences instead of paying attention to formal qualifications. In accordance with several education policy documents on the level of the European Union[1], teacher education has to be provided on a higher academic level and needs to allow teachers to become critical intellectuals who are capable of acting autonomously and competently in the interest of their students, in adherence to the ethical standards of their profession and specific professional standards (Green paper on teacher education in Europe, 2000: 18).

For the reality of university education to correspond as much as possible to the aforementioned ideal and for it to foster scientific research and high-quality performance of higher education teachers, as well as to allow scientific insights and critical reflection of students and train them to cope with the contemporary working conditions, it is necessary to modernize

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[1] The following are some of the contributions to the improvement of teacher education on the European Union level: Green paper on teacher education in Europe; Common European Principles for Teacher Competences and Qualifications (2005); EC Communication - Improving the Quality of Teacher Education (2007); TUNING Educational structures in Europe

the concept of teacher education. This implies the need to modify the teacher education curriculum by introducing radical changes in the organization of the study programme, as well as by introducing various methodological strategies which will train future teachers to integrate theory and practice and to exercise professional reflection before, during and after an educational activity, as well as to develop the ability to generalize and implement the acquired knowledge.

The following should serve as the basic guidelines for the development of curricula for the preparation of teachers as crucial agents of positive changes in the education for the future:

systematic integration of theoretical and practical class teaching by means of organized alternation between theoretical education at faculties and in-service teaching practice in schools;

gradual autonomisation of future teachers in planning, organization and implementation of teaching activities, as well as in the process of generalization and dissemination of the acquired theoretical knowledge;

continuous practicing of organized reflection on the practical experiences and research on the possibilities of improving the teaching process;

development of abilities to autonomously introduce innovations into teaching.

Instead of a conclusion

On the basis of the conducted analysis, it can be concluded that not a single initial teacher education model proposes a paradigm shift which would yield more successful results in comparison with other models in the preparation of teachers for work in the post-modern era. To navigate the complex demands of the modern society, the most appropriate is the initial teacher education model which integrates different types of knowledge and skills, and produces teachers who are capable of research and reflection – a model which will allow teachers to become critical intellectuals capable of acting autonomously and competently. It is questionable whether the introduction of curricular reform in primary and secondary education will bring about a radical change of the theoretical model of initial teacher education in Croatia, seen that the upcoming reform requires competent, creative and professionally autonomous teachers. Namely, if we base our considerations on the definition of teacher competences according to the Tuning Project (2006) in which competence refers to a dynamic combination of cognitive and metacognitive skills, knowledge and understanding, interpersonal and practical skills, and ethic values, then initial teacher education should primarily focus on producing cognizant, active, critical and socially responsible teachers who will be prepared to affect complex changes and challenges in their own community and in broader society by means of appropriate and efficient methods and actions (Diković, Piršl, Antunović 2016). To what extent are we ready to modify our initial teacher training model in Croatia in the contex of implementing the curricular reform by introducing and actively promoting "...(European) values: interculturalism, multiculturalism, democracy, human rights, tolerance, social justice, respect for differences, pacifism, prevention of wars and fight against crime..." (Ledić, Miočić, Turk, 2016: 28) as one of the guidelines of the European dimension in education, so that it does not remain mere ink on paper, but actually becomes a characteristic of future teachers as well as (European, global) citizens who will be capable of transferring, promoting and developing those competences in their students?

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