

Considering Transversal Competences, Personality and Reputation in the Context of the Teachers' Professional Development

Renata Čepić¹, Sanja Tatalović Vorkapić¹, Darko Lončarić¹, Dunja Anđić¹ & Sanja Skočić Mihić¹

¹ Faculty of Teacher Education, University of Rijeka, Rijeka, Croatia

Correspondence: Renata Čepić, Faculty of Teacher Education, University of Rijeka, Sveučilišna avenija 6, HR 51000 Rijeka, Croatia. Tel: 385-51-265-826. E-mail: renata@ufri.hr

Received: October 10, 2014 Accepted: November 11, 2014 Online Published: January 27, 2015

doi:10.5539/ies.v8n2p8

URL: <http://dx.doi.org/10.5539/ies.v8n2p8>

Abstract

The aim of this paper is to provide guidelines for reflection and improvement of transversal competences of teachers in the field of self-regulation, education for sustainable development and inclusion in the context of their continuing professional development. Also, the moderatory effect of personality based on literature analysis and insight into empirical results will be demonstrated. Teachers' reputation determines the framework of their professional development and is strongly influenced by social challenges, globalization, integration, sustainability, technological development, etc. In addition, a strongly biologically determined teacher's personality significantly moderates the relationship of their professional development and transversal competences. Transversal competences are recognized as the teachers' important skills in their organization of the teaching and learning process and their professional development, as well as in the process of them teaching these competences to their students. "Learning to learn" is recognized as the key lifelong learning competence in the European policy documents and the environmental and sustainability issues are some of the most common transversal themes of the general education curricula. The focus on the transversal competences is relatively new in education policies and has emerged as a reaction to the increased professional demands for a response to current educational needs of all students in inclusive environments. Analysis of transversal competences in the aforementioned three fields and their connection to personality traits will contribute to new knowledge regarding the teachers' professional education. Therefore, this paper will present the theoretical frameworks of the complex relationship between the teachers' reputation, personality and transversal competences in the light of the contemporary educational contexts.

Keywords: teachers' professional development, reputation, personality traits, transversal competences, learning to learn, education for sustainable development, inclusive education

1. Introduction

Professional development of teachers (Note 1) is a process during which teachers establish and maintain the highest level of professional expertise that is possible to achieve. The concept of "new professionalism" highlights some of the basic requirements for the modern, contemporary teachers as well as the professional commitment to learning, professional autonomy, dynamic understanding of learning (the teacher supports shared responsibility for the students' learning outcomes, and at the same time (s) he is an active and reflective "student" as well), and the cooperation and connection with the community. Professional development of teachers is important in order to improve the quality and efficiency of education, and to encourage the teachers' commitment to learning, responsibility, identity and professional satisfaction. Teachers are the result of their "cumulative autobiography"—they act on the basis of his/her constructs, beliefs and understanding of human learning, professional growth and development.

The teaching profession does not have a high social standing, no characteristics that would result in fame, wealth or power, and which represent the basic elements of the professional status in general. The teachers' social status, personal development and character are the key determinants of their professional development. A large number of studies have emphasized the importance of personality of teachers in the process of teaching and learning, as well as in relation to the learning outcomes (Vizek-Vidović, Vlahović-Štetić, Rijavec, & Miljković, 2003). Nevertheless, very few of them have exactly explored the specific impact of personality within the educational process. Since the beginning of Educational Psychology as an independent field in psychology, the strong impact

of individual personality differences among students and/or teachers, have been emphasized (Vizek-Vidović et al., 2003). A large number of studies have pointed out the importance of the teachers' personality in the context of their teaching style (Díaz-Larenas, Rodríguez-Moran, & Poblete-Rivera, 2011) and the students' personality regarding their learning style as well as in the relation to the learning outcomes. The teachers' personality significantly determines the style of teaching methods which the teacher uses, verbal and non-verbal expressions, attitude towards children, atmosphere in the kindergarten group/grade and kindergarten/school, learning outcomes and characteristics of the hidden curriculum.

New education policy documents emphasize the need to transform educational systems and teaching styles so as to increase the qualification levels of all learners and to prevent drop-outs, which involves, among other measures, teaching more transversal, general thinking skills. The teachers' competences present a complex combination of knowledge, skills, understanding, values and attitudes focused on quality work throughout the curriculum. European Union (EU) countries are leading by recommendation of eight key competences (European Parliament and Council of the European Union, 2006), which refer to important skills that are required in order to lead meaningful, productive and sustainable lives. Although there is an overlapping and supporting link between key competences, Gordon et al. (2009) observe that four competences (e.g. communication in the mother tongue, communication in foreign languages, mathematical competence, and basic competences in science and technology) tend to be anchored in subject-based curricula and are viewed as "traditional" competences. The other four competences (learning to learn, social and civic competences, sense of initiative and entrepreneurship and cultural awareness and expression) tend to need a higher degree of cross-curricular organization, and the "themes" of the EU Framework are seen as transversal competences or skills (Amadio, 2013). Traditional competences "describe cognitive skills as the ability to comprehend, retain and use formal education competences such as numeracy, literacy, logic, scientific knowledge, etc., and the transversal/non-cognitive skills refer to social, behavioral and emotional competences that facilitate one's understanding of and participation in the society" (Yano, 2013). The purpose of transversal or cross-curricular themes is to facilitate integrated learning across disciplinary boundaries as well as to foster links across learning areas and potentially even contribute to the development of key competences or skills.

Transversal competences are described by UNESCO (2013) as critical and innovative thinking, interpersonal and intrapersonal skills, global citizenship, physical and psychological health. The distinction between subject-based and transversal competences is not very clear (Amadio, 2013). In addition, many terms are "interchangeably" used to describe cross-curricular competences/skills across different countries as transversal skills, key competences, 21st century skills, and so on. New tasks and roles require new competences from teachers such as the "learning to learn" competence (including adaptation to change, self-regulated learning and coping with failure). These challenges impose on the teacher the need to develop higher levels of knowledge and complex cognitive skills. Amadio (2013) points out that the environmental and sustainability issues are reflected in the general goals of education in many countries and are some of the most common transversal themes of general education curricula. Transversal competences "learning to learn" and civil and social competences play a critical role in inclusive education. Inclusive education is "a process of addressing and responding to the diverse needs of all learners by increasing the participation in learning and by reducing the exclusion within and from education" (UNESCO, 2005, p. 13). A teacher in an inclusive classroom deals with diverse learners with different educational needs. This implies strengthening their interdisciplinary collaborative skills for modeling and development of transversal competences among students.

Overall, this paper will focus on three major concepts that are crucial for the effective and contemporary professional development of teachers: teachers' reputation, their personality and their competence to develop the students' transversal competences in educational practices. In the light of contemporary educational needs of all children and the constantly changing world, it is necessary to analyze the relationship between these concepts within the context of the existing study and to propose some guidelines for future empirical research. The methodology that could contribute to a better understanding of this complex relationship is mainly quantitative. Therefore, the measures that could be applied are measures used in the Talis technical report (OECD, 2014) for exploring professional development and reputation, Self-Regulated Learning Teacher Belief Scale (SRLTB) (Lombaerts, De Backer, Engels, Van Braak, & Athanasou, 2009), a survey for inclusion attitudes from the study of Avramidis and colleagues (2000), Rieckmann's survey for education for sustainable development (2012) and Big Five Inventory (Costa & McCrae, 1994).

2. Teachers' Professional Development: Contextualizing the Concept

Research on the teachers' professional development has been prompted by results of new research on the quality of education which unquestionably points to the fact that teachers are the most important external contributors to

a students' achievement (e.g. EU Commission, 2010; Hattie, 2012; Mourshed, Chijioko, & Barber, 2010; Vizek-Vidović & Velkovski, 2013; Creemers, Kyriakides, & Antoniou, 2013). In the literature on the teachers' professional development, authors start from a variety of views on the methodology, structure and philosophical perspectives of different approaches to teacher training and their professional development, and the role of teachers in the developmental process (Day, 1999; Day et al., 2007; Hargreaves, 1994). In particular, Zeichner (1983, according to Creemers et al., 2013, p. 4) was the first to identify and describe the four representative paradigms in the teachers' education and professional development. He defines the paradigm as a 'matrix of beliefs and assumptions about the nature and purposes of schooling, teaching, teachers, and their education that gives shape to specific forms of practice in teacher education. These are: the traditional *craft paradigm*, *expanding the repertoire paradigm* that is directed less at highly explicit and discrete instructional strategies and teaching skills and more at the acquisition of comprehensive instructional models of teaching, the *competency based paradigm*, also known as the *expert paradigm*, which is predominant in teacher education, and finally, opposing the *competency-based paradigm* is the *inquiry-oriented paradigm*, also known as the *holistic or reflective paradigm*. For example, Vizek-Vidović (2011, pp. 39-96) highlights three perspectives in the study of the teachers' professional development: research in an attempt to identify the prototype stage or stages in the development of the teachers' careers and their characteristics; studies that analyze the internal and external factors of the teachers' professional development and which contribute to the formation of the professional identity; and research focused on effective approaches to learning and teaching at different stages of the teachers' professional development. Lately, experts in the field of education have been increasingly dealing with the issues of ensuring conditions and opportunities that can foster or hinder professional development of teachers (Čepić, 2009; Čepić & Krstović, 2011).

At the center of numerous research studies which deal with the questions of teachers' professional training and development, two different and quite opposite approaches are dominant: the *competence based approach* and the *holistic or reflective approach*. The competence-based approach has had a significant effect on teacher training and development and can be found nowadays in many countries (Christie & O'Brien, 2005). Such standards refer to competences expected at different stages of a teacher's career and provide a framework for the development of the teachers' professional development programs. On the other hand, the dominant approach to the teachers' professional development nowadays is that of the holistic or reflective practice (Golby & Viant, 2007). Schon's *The Reflective Practitioner* (1983) and *Educating the Reflective Practitioner* (1987) have had a significant effect on the mainstream teachers' opinion about reflection. This approach refers to various practices, ranging from reflection as a component of skills and a means of fostering effective teaching to reflection as a heightening of one's awareness of social justice in the educational practice. The terms "reflection," "reflective practice" and "reflective practitioners" abound in the literature of teacher education and professional development (see Huang, 2008; Admiraal & Wubbels, 2005; Birmingham, 2004; Loughran, 2002; Moon, 2004; Rodgers, 2002). This holistic approach has also been described as a reaction against more centralised policy perspectives in teacher training and professional development, which regard teachers as technicians, a view promoted by the competence-based approach.

In the recently conducted comprehensive overview of literature on the teachers' professional development Creemers et al. (2013) provide a critical review of the two dominant approaches to the teachers' development such as the competence-based and the holistic approach, and reveal that both of them have strengths but also weaknesses. It is argued that we may have to guard ourselves against narrowing down the discussion to this classical dichotomy relating to the content and to develop an integrated approach to the teachers' professional development that will be focused on an improved way of grouping factors associated with the teachers' behaviour in the classroom. Therefore, these authors believe that for this purpose, not only should reflection and understanding of practice be encouraged but research on teacher effectiveness should also be taken into account. Building on the previous discussion about the dominant approaches in research on professional development, they argue that the two dominant approaches could be integrated into a dynamic approach in order to overcome their main weaknesses. Emphasizing the need to establish a dynamic integrated approach to the teachers' professional development, Creemers et al. (2013) claim that research on teacher training and development should increasingly take into account the results of research on teacher effectiveness, addressing the skills and competences that are found to contribute to the students' learning.

Each of the aforementioned approaches has its strengths and weaknesses, and with the aim of developing effective teacher professional development programs, different approaches should be combined rather than focusing on one specific approach. It can be claimed that teacher professional development should take into account developing those skills that are found to be associated with successful learning outcomes, irrespective of

the approach from which they are derived, as many authors emphasize in recent research (Creemers et al., 2013, p. 7).

3. Personality in the Process of Learning and Teaching

The teachers' self-development and personality properties present two major key determinants of their overall professional development. According to Petrovici (2007), the specific behaviour of teachers is based on several components, and one of the most important is the whole inner personality structure. This significance of personality is noticeable in the definition of the didactical professional competence defined as: "ensemble of cognitive, affective, motivational capacities, which together with the personality features provide the teacher with qualities necessary to carrying on a didactical activity which fulfils the proposed objectives and has very good results" (Diaconu, 2002, p. 27). The presumed mediated role of personality and its significance could be observed in the following definition of the teaching staff's professional competence: "an ensemble of cognitive, affective, motivational and managerial capacities which interact with the educator's personality characteristics giving them the qualities necessary to performing a didactic work which should ensure the projected objectives to be carried out by the most part of the students, and the obtained performances to be situated near the maximum level of everybody's intellectual potential" (Jinga, 1998, p. 78).

Even though personality presents the crucial part of the teachers' competence and their professional development, very few empirical studies have explored the details concerning the direction of the personality impact within the educational process (Tatalović-Vorkapić, 2012). In addition, previous research has emphasized that apart from the individuals' motivation, personality traits present the major non-cognitive skill in teacher and other vocations that significantly influence their professional development (Brunello & Schlotter, 2011). In their study, authors note that: "...personality traits are important components of transversal skills, and may also be considered as factors that contribute to the development of these skills" (Brunello & Schlotter, 2011, p. 4). The most used personality theoretical framework for this kind of analysis has been the Big-Five model (Goldberg, 1990). This worldwide used personality theory has been used to structure individual differences of human feelings and experiences within five basic tendencies: extraversion, emotional stability, conscientiousness, agreeableness and openness to experience (or intellect according to a similar Five-Factor model (Costa & McCrae, 1994)). According to this theory, human personality can be described as a dynamic relationship between previously mentioned five factors (Pervin & John, 1997). Highly extraverted individuals are very sociable, talkative, affectionate, active and dominant, and mainly have positive emotionality and positive interaction with others. Instead of that, highly introverted subjects are often described by others as reserved, quiet, unsociable, serious, balanced and task-oriented, not often seen with other people. As for the teachers' extraversion level, it was assumed that it will be very high, due to their job demands, which studies have confirmed (Tatalović-Vorkapić, 2012; Tatalović-Vorkapić & Lončarić, 2013). Furthermore, subjects with high levels of neuroticism are often perceived as nervous, irritable, unreliable, worrying, inadequate, too reactive and insecure. On the other hand, individuals scoring low on this scale showed emotional stable behaviour: they are calm, secure, relaxed, self-satisfied and hardy. Again, it is very reasonably expected that teachers have lower levels of neuroticism, which has also been determined in previous research (Tatalović-Vorkapić, 2012). Individuals with high levels of agreeableness are described as trusting, honest, helping, softhearted, and straightforward, of a good nature and open-minded. Opposite to them are persons who are rude, manipulative, suspicious, ruthless, cynical, uncooperative, irritable and rude. Highly conscientious persons are very reliable, organized, assured, self-disciplined, ambitious, polite, neat, scrupulous, committed, punctual, considerate and persevering, whereas those on the opposite pole of the dimensions are seen as hedonistic, careless, inconsiderate, lazy, weak-willed, unreliable, inert, imprudent, aimless, negligent, with no aspirations and indifferent. Finally, individuals highly open to experience are described as imaginative, creative, curious, of broad interests, non-conventional, operational, intelligent and adventurous, while those with the low levels of openness to experience are known as traditional narrow-hearted, inartistic, down-to-earth, not curious, limited and not interested to explore (Pervin & John, 1997). Apart from previously mentioned highly expected levels of extraversion and emotional stability, higher levels of agreeableness, conscientiousness and openness to experience are expected among teachers too, as evidenced by previous works. In line with those argumentative expectations, the highly extraverted and open-minded individuals due to their high flexibility are able to adapt their behavior to the special needs of children included in (pre)school classes. In addition, those teachers have the most success in the interaction with parents due to their high communicative abilities. Furthermore, the competence called "learning to learn," which includes self-discipline, perseverance and motivation, has a high positive correlation with conscientiousness, since both are related to the internal locus of control. In addition, "social and civic competencies" and the "sense of initiative and leadership" could be recognized within the competences needed in the inclusion classes and

sustainable development, and they are strongly related to the agreeableness, extraversion and openness to experience. The “sense of initiative and leadership” has properties such as risk taking, leadership, creativity and innovation, which are also significant parts of the openness to experience. Finally, the features of high tolerance, communications skills, coping with stress and empathy are included in personality traits of extraversion, agreeableness and emotional stability same as in the transversal competence called “social and civic competences” (Brunello & Schlotter, 2011). It is evident that personality traits are very important components of transversal competences, so when exploring transversal competences, the personality traits’ analysis should be performed.

4. Transversal Competences in the Field of Self-Regulation, Education for Sustainable Development and Inclusion

An overview will be given of different research studies which put into relation the aforementioned segments of transversal competences.

4.1 Learning to Learn

“Learning to learn” is defined as the key lifelong learning competence (European Parliament and Council of the European Union, 2006), sometimes labeled as transversal competence indicating its generic nature and applicability across different subjects and activities, or as meta-competence (Thematic Working Group “Teacher Professional Development,” 2013). However, it could be more appropriately labeled as meta-learning because the term meta-competence would imply “competence to develop competences,” describing most of the teachers’ professional work.

Since then, considerable effort has been made to achieve conceptual clarity of the “learning to learn” concept and the development of the “learning to learn” indicators necessary to monitor progress in policy implementation (Fredriksson & Hoskins, 2008). “Learning to learn” is described as the lifelong learning key competence and also as a transversal competence essential for an individual to be employable and socially included. This allows the separation of that construct from the domain of specific competences that may be relevant to specific occupations. “Learning to learn” can also be classified in a category of cross-curricular competences as opposed to curriculum-bounded competences (Tiana, 2004).

The EU working group on “Key competences” has identified the “learning to learn” construct as follows: ““Learning to learn” is the ability to pursue and persist in learning, to organise one’s own learning, through effective management of time and information, both individually and in groups. This competence includes awareness of one’s learning process and needs, identifying available opportunities, and the ability to overcome obstacles in order to learn successfully. This competence means gaining, processing and assimilating new knowledge and skills as well as seeking and making use of guidance. Learning to learn engages learners to build on prior learning and life experiences in order to use and apply knowledge and skills in a variety of contexts: at home, at work, in education and in training. Motivation and confidence are crucial to an individual’s competence” (European Parliament and Council of the European Union, 2006, annex, paragraph 5).

This latter “learning to learn” definition contains elements from both social-cultural and cognitive psychological traditions as well as both affective and cognitive dimensions. Some authors (McCormick, 2006) focus more on the metacognitive aspects such as knowledge about cognition (knowing what you know and don’t know) and self-regulating mechanisms (planning what to do next, checking outcomes of strategies, evaluating and revising strategies). This leads us to the conclusion that the “learning to learn” construct is closely related to self-regulated learning (Pintrich, 2004; Zimmerman, 1989), a concept that has attracted considerable attention in research over several decades. Self-regulated learning is also focused on cognitive and affective dimensions of learning although there are other, less formal and more functional classifications of learning styles, strategies or patterns such as the deep, surface and strategic approach (Entwistle, Tait, & McCune, 2000) or the proactive and defensive pattern of self-regulated learning (Lončarić, 2011; Lončarić & Peklaj, 2008). On the other hand, the “learning to learn” competence should not be reduced to the learning strategies as it includes a complex set of motivational and personal variables such as self-esteem and the ability to use learning strategies in an appropriate way (Fredriksson & Hoskins, 2008).

In addition to different conceptualisations of the “learning to learn” competence, there have been several efforts to measure indicators of this construct. They include several projects such as: the University of Helsinki project “Life as Learning (LEARN)” (Hautamäki et al., 2002); a project related to construction of the Effective Lifelong Learning Inventory (ELLI) developed by the University of Bristol (Deakin-Crick, Broadfoot, & Claxton, 2004); a project developed by the University of Amsterdam referred to as the Cross-Curricular Skills Test (CCST; Elshout-Mohr, Meijer, Oostdam, & van Gelderen, 2004); and an initial framework for a European test to measure

“learning to learn” (Fredriksson & Hoskins, 2008).

This review indicates that steps have been taken to address the conceptual and measurement issues. Unfortunately, the teachers’ competence to support students in developing the “learning to learn” competence has not been sufficiently researched, and empirical evidence about effectiveness of the teachers’ efforts and planned interventions in curriculum is scarce. Some information has been collected about the effectiveness of several self-regulated learning programs (Dignath, Buettner, & Langfeldt, 2008), but the application of the teaching strategies to support the “learning to learn” competence and its systematic evaluation is still in its early up-and-coming stages.

4.2 Education for Sustainable Development Competences in Teacher Education

Teacher competences and their development are a priority task of the holistic and cross-curricular approach to the concept of education for sustainable development, i.e. to the concept as being multidimensional (environmental, social, political and economic dimension of sustainability), and transversal, interdisciplinary and integrative (Andić, 2011, p. 88). Education for Sustainable Development [ESD] competences are competences for teachers who are presumed to use their competences in three different social settings: instruction, participation in the design of one’s own educational institution; and reaching out to society, to the institution’s closer and wider environment (Rauch & Steiner, 2013, p. 16). The following researches present the basis of our research on transversal teacher competences for ESD.

There are currently two most represented models of teacher competences for ESD on the international scene: *Gestaltungskompetenz* (also known as the shaping competence) is discussed as the central educational objective of ESD and the Global learning approach which identifies a wide range of concrete themes and topics which should be considered in the process of individual competence development (Adom̃ent & Hoffmann, 2013, p. 2). The German model *Gestaltungskompetenz* (12 key *Gestaltungskompetenz* by De Haan, 2006; 2008) is based on the attitude that with the development of these competences, an active participation in the social changes is incited, a future of the society modified and shaped in accordance with the fundamentals of sustainable development. Apart from De Haan (2006, 2008), Barth et al. (2007) and Wals (2010) have also dealt with the shaping competence term. Wals’s model describes the term competence of sustainability which is based on the so called transformative social learning as a form of learning, and whose characteristic is development of sustainability. The author connects the terms *Gestaltswitching-Gestalt* and *Gestaltungskompetenz*. In the context of sustainability, the temporal, disciplinary, spatial and cultural *Gestalt* (Wals, 2010) are interchanged, and in the subsequent elaboration also the “trans-human” *Gestalt*. *Gestaltungsskompetenz* model is, furthermore, significantly imbedded into the *CSCT Framework Competencies for ESD (Education for Sustainable Development Teachers)* (its implementation is possible within the various educational systems of European countries). The model is based on the development of *professional* (teacher as: individual in complex interactions with the students, part of an institution and part of the society) and *general competences* (communication, visioning or reflection and networking). Values and ethics, action, knowledge, emotions and systemic thinking are understood under the term *special competences* (Sleurs, 2008). De Haan’s competence model has served a purpose also as a model for connecting with competences of lifelong learning, such as the OECD’s competence framework (2005 as *part-competencies of Gestaltungsskompetenz*) and is noticeable in the ENSI approach. Previous studies on teacher competences for ESD have often included the development of the models themselves (Wals, 2010; Sims & Falkenberg, 2013). Rieckmann (2012) compares European and Latin-American estimations of the 12 *Gestaltungs-competences* whose results point out to a different view of the meaning of individual competences, but simultaneously to the common points with other development models of competence development (Adom̃ent & Hoffmann, 2013, p. 4). Results of Rieckmann’s (2012, pp. 127-135) research show that “19 key competences selected by the Delphi respondents can be subsumed in a set of twelve key competences which include all relevant dispositions and aspects identified in his study: competence for systemic thinking and handling of complexity; competence for anticipatory thinking; competence for critical thinking; competence for acting fairly and ecologically; competence for cooperation in (heterogeneous) groups; competence for participation; competence for empathy and change of perspective; competence for interdisciplinary work; competence for communication and use of media; competence for planning and realising innovative projects; competence for evaluation and competence for ambiguity and frustration tolerance.”

In the context of the teachers’ competence development, it is necessary to point out another important area of research—and that is research on proecological/environmental and sustainable behavior. This need to research and the models of explaining and predicting of sustainable behavior is highlighted by a number of studies which directly and indirectly indicate the need for an interdisciplinary approach to this problem. This is especially evident in the contemporary research models of sustainable behavior which connect psychological, economic,

sociological and pedagogical models. Those results represent also the foundation of our research on transversal teacher competence for ESD (Frisk & Larson, sustainability competence and behaviour change, 2011; Najera, Sociopsychological model of sustainable behavior, 2010; McKenzie-Mohr, Community-based social marketing model, 2008; Corral-Verdugo et al., The concept of affinity towards diversity, 2009; socio-psihological-educational model by Anđić & Tatalović Vorkapić, 2014 based on Najera's (2010) model). They form the foundation both for research on sustainable behavior which we have applied in this cross-cultural research.

4.3 Transversal Competences in Inclusive Education

Inclusive education is a holistic concept and an on-going process aimed at eliminating all forms of discrimination and bringing the concept Education for all (UNESCO, 2009). It is one of the greatest challenges in education systems with various ways of implementation. Quality education for all learners means respect for "diversity and different needs and abilities, characteristics and learning expectations of the students and communities" (Acedo et al., 2008). So this broadened concept of inclusive education can be "a general guiding principle to strengthen education for sustainable development, lifelong learning for all levels of the society to learning opportunities" (UNESCO, 2008).

Although the policy of inclusive education is established in many jurisdictions worldwide, it is still unclear how to enact that policy in regular classrooms. It is well known that successful implementation of any inclusive policy depends largely on the teachers' positive attitudes toward the students with Special Educational Needs [SEN] and their knowledge, skills and competences necessary to work in inclusive classrooms. Literature review indicates that the teachers' attitudes are positive and strongly influenced by the nature and severity of the disabling condition presented to them but without evidence of acceptance of a total inclusion or "zero reject" approach to the special educational provision (Avramidis & Norwich, 2002). The teachers' positive attitudes are related to previous experience with disabilities (Everington, Stevens, & Winters, 1999), active experience of inclusion through implementing inclusive programs (Avramidis, Bayliss, & Burden, 2000) and feeling of competence (Everington et al., 1999; Skočić-Mihić, 2011; Williams & Foulger, 2009). The teachers' positive attitudes are also related to the internal locus of control (Kiš-Glavaš, 1999), which is significantly connected to the personality trait consciousness and the competence "learning to learn" (Brunello & Schlotter, 2011).

Although two-thirds of teachers agree with general concept of inclusion, only one-third or less believes they have sufficient time, skills, training and resources necessary for the inclusion (Scruggs & Mastropieri, 1996). Classroom teachers often report feeling unprepared for inclusive education and lacking the necessary knowledge and skills to work with students with SEN in inclusive classrooms (Florian & Linklater, 2010). Also, they are insufficiently trained to know and use methods how to include, teach and evaluate a broad range of children with various levels of competence and difficulties (Lebeer, 2006).

European Education policy makers agree that teachers should be equipped with knowledge, skills, attitudes and values so as to meet the individual needs of all learners emerging from diverse backgrounds. Therefore the crucial issue is how knowledge is transferred to everyday practice of teachers and how learning should be strongly connected with real life situations to which teachers could easily relate (Kaikkonen, Maunonen-Eskelinen, & Aidukiene, 2007). The challenge for teachers is to learn and develop the students' self-assessment methods, teach them to the students and teach the students to reflect on their learning process (Kaikkonen et al., 2007). Obviously by describing these competences, we arrive to the construct of the "learning to learn" competence. The ability to organize one's own learning and to overcome obstacles in order to learn successfully is strongly embedded in the competences needed for inclusive teaching on two levels: teachers and students. Teachers are insufficiently strained to use the cognitive activation methods of "learning to learn" (Lebeer, 2006).

In the ongoing trend towards inclusive education, initial teacher education programs must ensure the approach to prepare teachers to enter a profession in which they take responsibility for the learning and the achievement of all students (Florian, 2012; Peček & Macura-Milovanović, 2012). This preparation should necessarily involve holding certain attitudes and values in relation to the inclusion, as well as possessing knowledge and skills relevant for teaching in inclusive settings (Acedo et al., 2008). The university-based professional development has influence on the teachers' positive attitudes and confidence in meeting the IEP requirements of students with SEN (Avramidis et al., 2000) and teacher candidates' attitudes and abilities (Van Laarhoven, Munk, Lynch, Bosma, & Rouse, 2007). Ongoing professional development should enable access to in-service programs to secure the additional skills and competencies needed for an inclusive practice. An increase in the number of years involved with inclusion and participation in formal training were associated with a reduction in stress

(Forlin, 2001) and higher feeling of competence (Avramidis & Norwich, 2002; Skočić-Mihić, 2011).

5. Conclusion

Despite the recognition of its importance and the pressures emanating from contemporary educational demands, most professional development opportunities remain fragmented, insufficiently connected to the curricula and are inadequate to meet the teachers' needs, conditions and possibilities. It seems that contemporary changes alter the demands from the teaching profession and it is necessary to find ways to keep the education standard and the professional status of teachers on high levels. Social reputation, personal development and the teachers' personality represent the key determinants of their professional development. Research has indicated that highly expected levels of extraversion and emotional stability, higher levels of agreeableness, conscientiousness and openness to the experience are expected among teachers. The teachers' personality significantly determines the teaching style, methods which the teacher uses, verbal and nonverbal expression, attitude toward children, atmosphere, learning outcomes and the characteristics of the hidden curriculum. Furthermore, the teachers' personality and personality variables have moderating effects on the status and the teacher's competences both generally and on the transversal competences.

The teachers' transversal competences in the field of self-regulation, education for sustainable development and inclusion are insufficiently explored, even though there is considerable room for improvement in the area of interdisciplinary and cross-cultural research. Teachers already have to deal with an overloaded curriculum and different demands in inclusive settings. Therefore it may be difficult to find a way to develop demanding transversal competences, as these, in principle, require high levels of teacher and student engagement and interaction. The development of transversal competences still needs to be implemented in the initial and continuous professional teacher education. Competences are the key prerequisite which contributes to the development of the core values of education for sustainable development whereby the functional connectedness of education for sustainable development with the teachers' professional development is crucial.

According to recent inclusive policy documents, almost every preschool and elementary school teacher has worked in inclusive classrooms, comprised of students with different educational needs. Therefore it is crucial to examine the relation between competences and the motivational factors, activities and the environment which is supportive of the self-regulation of behavior and the competences for education for sustainable development with diverse learners, and the moderating effect of the teachers' personality.

The teachers' personality significantly moderates effects of professional development programs on their competences to develop the students' transversal competences as well as the effects of professional development of these newly acquired competences on their professional status. For the largest group of already employed teachers, it takes additional effort to develop these competences through professional development. It can increase the teacher's abilities to react and cope with increasingly demanding situations in inclusive educational settings and can result in benefits for the teacher's reputation in a society.

Acknowledgments

This research was run within the project: "Professional Development of Teachers: Reputation, Personality and Transversal Competencies", project's number: 13.10.2.2.02., which is supported as an initial scientific project for young researchers (2013-2015) by University of Rijeka, Croatia.

References

- Acedo, C., Amadio, M., Opertti, R., Brady, J., Duncombe, L., Weyermann, M., . . . Xu, X. (Eds.). (2008). *Defining an Inclusive Education Agenda: Reflections around the 48th Session of the International Conference on Education*. Geneva. Retrieved from <http://unesdoc.unesco.org/images/0018/001868/186807e.pdf>
- Admiraal, W., & Wubbels, T. (2005). Multiple voices, multiple realities, what truth? Student teachers' learning to reflect in different paradigms. *Teachers and Teaching: Theory and Practice*, 11(3), 315-329. <http://dx.doi.org/10.1080/13450600500105668>
- Adomßent, M., & Hoffmann, T. (2013). *The concept of competencies in the context of Education for Sustainable Development (ESD)*. Retrieved March 2014, from <http://esd-expert.net/assets/130314-Concept-Paper-ESD-Competencies.pdf>
- Amadio, M. (2013). *A rapid assessment of curricula for general education focusing on cross-curricular themes and generic competences or skills*. Paper commissioned for the EFA Global Monitoring Report 2013/4, Teaching and learning: Achieving quality for all". Retrieved from

- <http://unesdoc.unesco.org/images/0022/002259/225939e.pdf>
- Andić, D. (2011). *Škole u promicanju odgoja i obrazovanja za održivi razvoj* (Doctoral dissertation). Rijeka: Filozofski fakultet u Rijeci.
- Andić, D., & Tatalović-Vorkapić, S. (2014). Interdisciplinary Approaches to Sustainable Development in Higher Education: A Case Study from Croatia. In K. D. Thomas, & H. E. Muga (Eds.), *Handbook of Research on Pedagogical Innovations for Sustainable Development* (pp. 67-115). USA, Hershey PA 17033: IGI Global book series Practice, Progress, and Proficiency in Sustainability.
- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration / inclusion: A review of the literature. *European Journal of Special Needs Education*, 17(2), 129-147. <http://dx.doi.org/10.1080/08856250210129056>
- Avramidis, E., Bayliss, P., & Burden, R. (2000). A Survey into Mainstream Teachers' Attitudes Towards the Inclusion of Children with Special Educational Needs in the Ordinary School in one Local Education Authority. *Educational Psychology*, 20(2), 191-221. <http://dx.doi.org/10.1080/713663717>
- Barth, M., Godemann, J., Rieckmann, M., & Stoltenberg, U. (2007). Developing key competences for sustainable development in higher education. *International Journal of Sustainability in Higher Education*, 8(4), 416-430. <http://dx.doi.org/10.1108/14676370710823582>
- Birmingham, C. (2004). Phronesis: A model for pedagogical reflection. *Journal of Teacher Education*, 55(4), 313-324. <http://dx.doi.org/10.1177/0022487104266725>
- Brunello, G., & Schlotter, M. (May 2011). Non Cognitive Skills and Personality Traits: Labour Market Relevance and their Development in Education & Training Systems. *IZA Discussion Paper No. 5743*, 1-46. Bonn: Institute for the Study of Labor (IZA).
- Čepić, R. (2009). Razvoj infrastrukture kontinuiranog učenja i stvaranja znanja: višestruke perspektive. *Pedagoška istraživanja*, 6(1-2), 163-178.
- Čepić, R., & Krstović, J. (2011). Through lifelong learning and learning organisations towards sustainable future. *International Journal of Innovation and Learning*, 10(2), 195-213.
- Christie, F., & O'Brien, J. (2005). A continuing professional development framework for Scottish teachers: Steps, stages, continuity or connections? In A. Alexandrou, K. Field, & H. Mitchell (Eds.), *The continuing professional development of educators* (pp. 93-110). Oxford, UK: Symposium Books.
- Corral-Verdugo, V., & Pinheiro, J. Q. (2004). Aproximaciones al estudio de la conducta sustentable. *Medio Ambiente y Comportamiento Humano*, 5, 1-26.
- Costa, P. T., Jr., & McCrae, R. R. (1994). Set like plaster? Evidence for the stability of adult personality. In T. F. Heatherton, & J. L. Weinberger (Eds.), *Can personality change?* (pp. 21-40). Washington, DC: American Psychological Association. <http://dx.doi.org/10.1037/10143-002>
- Creemers, B. P. M., Kyriakides, L., & Antoniou, P. (2013). *Teacher Professional Development for Improving Quality of Teaching*. London: Springer.
- Day, C. (1999). *Developing teachers: The challenges of lifelong learning*. London: Falmer Press.
- Day, C., Sammons, P., Stobart, G., Kingston, A., & Gu, Q. (2007). *Teachers matter. Connecting work, lives and effectiveness*. Maidenhead: Open University Press.
- De Haan, G. (2006). The BLK '21' programme in Germany: A 'Gestaltungskompetenz'-based model for Education for Sustainable Development. *Environmental Education Research*, 12(1), 19-32. <http://dx.doi.org/10.1080/13504620500526362>
- De Haan, G. (2008). Gestaltungskompetenz als Kompetenzkonzept für Bildung für nachhaltige Entwicklung. In I. Bormann, & G. de Haan (Eds.), *Kompetenzen der Bildung für nachhaltige Entwicklung. Operationalisierung, Messung, Rahmenbedingungen, Befunde* (pp. 23-44). Wiesbaden: VS-Verlag. http://dx.doi.org/10.1007/978-3-531-90832-8_4
- Deakin Crick, R., Broadfoot, P., & Claxton, G. (2004). Developing an Effective Lifelong Learning Inventory: The ELLI Project. *Assessment in Education: Principles, Policy & Practice*, 11(3), 247-272.
- Diaconu, M. (2002). Competentele profesiei didactice. In L. Gliga (Ed.), *Standarde Profesionale pentru profesia didactică* (pp. 25-35). București, PolSib SA: Ministerul Educației și Cercetării.
- Díaz-Larenas, C. H., Rodríguez-Moran, A. V., & Poblete-Rivera, K. J. (2011). Comparing Teaching Styles and

- Personality Types of EFL Instructors in the Public and Private Sectors. *Profile*, 13(1), 111-127.
- Dignath, C., Buettner, G., & Langfeldt, H.-P. (2008). How can primary school students learn self-regulated learning strategies most effectively? *Educational Research Review*, 3(2), 101-129. <http://dx.doi.org/10.1016/j.edurev.2008.02.003>
- EC. (2010). Developing coherent and system-wide induction programmes for beginning teachers—A handbook for policymakers. Brussels: European commission. Retrieved from <http://ec.europa.eu/education/school-education/doc/handbook0410-en.pdf>
- Elshout-Mohr, M., Meijer, J., Oostdam, R. & van Gelderen, A. (2004). *CCST: A Test for Cross-Curricular Skills*. Amsterdam: SCO-Kohnstamm Institution, University of Amsterdam.
- Entwistle, N., Tait, H., & McCune, V. (2000). Patterns of response to an approaches to studying inventory across contrasting groups and contexts. *European Journal of Psychology of Education*, 15(1), 33-48. <http://dx.doi.org/10.1007/BF03173165>
- European Parliament and Council of the European Union. (2006). European Union Framework of Key Competencies for Life Long Learning. Recommendation of the European Parliament and of the Council, of 18 December 2006, on key competencies for lifelong learning. *Official Journal of the European Union*, 2006/962/E, L394/10-18. Retrieved from <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006H0962&from=EN>
- Everington, C., Stevens, B., & Winters, V. R. (1999). Teachers' attitudes, felt competence, and need of support for implementation of inclusive educational programs. *Psychological Report*, 8, 331-338. <http://dx.doi.org/10.2466/pr0.1999.85.1.331>
- Florian, L. (2012). Preparing Teachers to Work in Inclusive Classrooms: Key Lessons for the Professional Development of Teacher Educators from Scotland's Inclusive Practice Project. *Journal of Teacher Education*, 63(4), 275-285. <http://dx.doi.org/10.1177/0022487112447112>
- Florian, L., & Linklater, H. (2010). Preparing teachers for inclusive education: using inclusive pedagogy to enhance teaching and learning for all. *Cambridge Journal of Education*, 40, 369-386. <http://dx.doi.org/10.1080/0305764X.2010.526588>
- Forlin, C. (2001). Inclusion: Identifying potential stressors for regular class teachers. *Educational Research*, 43(3), 235-245. <http://dx.doi.org/10.1080/00131880110081017>
- Fredriksson, U., & Hoskins, B. (2008). Learning to learn: What is it and can it be measured? *JRC Scientific and Technical Reports*. European Commission JRC. <http://dx.doi.org/10.2788/83908>
- Frisk, E., & Larson, K. L. (2011). Educating for sustainability: Competencies & practices for transformative action. *Journal of Sustainability Education*, 2, 1-20.
- Golby, M., & Viant, R. (2007). Means and ends in professional development. *Teacher Development*, 11(2), 237-243. <http://dx.doi.org/10.1080/13664530701414886>
- Goldberg, L. R. (1990). An alternative "Description of Personality": The Big-Five factor structure. *Journal of Personality and Social Psychology*, 59, 1216-1229. <http://dx.doi.org/10.1037/0022-3514.59.6.1216>
- Gordon, J., Halász, G., Krawczyk, M., Leney, T., Michel, A., Pepper, D., . . . Wisniewski, J. (2009). *Key Competences in Europe: Opening Doors for Lifelong Learners Across the School Curriculum and Teacher Education*. Center for Social and Economic Research (CASE) Network Report No. 87. Warsaw. Retrieved from <http://www.econstor.eu/bitstream/10419/87621/1/613705459.pdf>
- Hargreaves, A. (1994). *Changing teachers, changing times: Teachers' work and culture in the postmodern age*. London/New York/Toronto: Cassell/Teachers College Press/University of Toronto Press.
- Hattie, J. (2012). The flow of the lesson—The Place of Feedback. In J. Hattie (Ed.), *Visible Learning for Teachers: Maximizing Impact on Learning* (pp. 115-137). London: Routledge.
- Hautamäki, J., Arinen, P., Eronen, S., Hautamäki, A., Kupianen, S., Lindblom, B., . . . Scheinin, P. (2002). *Assessing Learning-to-Learn: A Framework*. Helsinki: Centre for Educational Assessment, Helsinki University/National Board of Education.
- Huang, H. J. (2008). Professional development through reflection: A study of pre-service teachers' reflective practice. *International Electronic Journal for Leadership in Learning*, 5(6). Retrieved from <http://www.ucalgary.ca/iejll/huang>

- Jinga, I. (1998). *Manual de Pedagogie*. Manual destinat studenților de la DPPD din cadrul MAN, București, Ed. ALL Educational S.A.
- Kaikkonen, L., Maunonen-Eskelinen, I., & Aidukiene, T. (2007). Supporting Teachers' Competencies towards the Development of a More Inclusive School - Listening to the Voices of Students with Special Educational Needs in Educational Transitions. *Pedagogy and Teachers' Education*, 715, 132-144. Retrieved from <http://pdc.ceu.hu/archive/00005366/01/715.pdf#page=132>
- Kiš-Glavaš, L. (1999). Promjena stava učitelja prema učenicima usporenog kognitivnog razvoja (Unpublished Doctoral dissertation). University of Zagreb, Faculty of Education and Rehabilitation Sciences, Croatia.
- Lebeer, J. (2006). Clues to inclusive and cognitive education: reconciling needs to integrate and to activate learning processes. *Transylvanian Journal of Psychology*, 2(1), 31-61.
- Lombaerts, K., De Backer, F., Engels, N., Van Braak, J., & Athanasou, J. (2009). Development of the self-regulated learning teacher belief scale. *European Journal of Psychology of Education*, 24, 79-96. <http://dx.doi.org/10.1007/BF03173476>
- Loncaric, D. (2011). To Flourish, Arm or Fade Away? Proactive, Defensive and Depressive Patterns of Self-Regulated Learning. In I. Brdar (Ed.), *The Human Pursuit of Well-Being* (1st ed., pp. 175-189). London: Springer Netherlands. <http://dx.doi.org/10.1007/978-94-007-1375-8>
- Lončarić, D., & Peklaj, C. (2008). Proaktivna in defenzivna samoregulacija pri učenju [Proactive and defensive self-regulation in learning]. *Psihološka Obzorja*, 17(4), 73-88.
- Loughran, J. J. (2002). Effective reflective practice: In search of meaning in learning about teaching. *Journal of Teacher Education*, 5(1), 33-43. <http://dx.doi.org/10.1177/0022487102053001004>
- McCormick, R. (2006). *Learning how to learn: A view from the LHTL project England*. Learning to learn network meeting report from the first network meeting, 30-31 January. 2006. Ispra: CRELL/JRC.
- McKenzie-Mohr, D. (2008). Fostering sustainable behavior: Beyond brochures. *International Journal of Sustainability Communication*, 3, 108-118.
- Moon, J. A. (2004). *Reflection in Learning and Professional Development*. London and New York: Routledge Falmer.
- Mourshed, M., Chijioko, C., & Barber, M. (2010). *How the world's most improved school systems keep getting better*. McKinsey and Co. Retrieved from http://www.mckinsey.com/client_service/social_sector/latest_thinking/worlds_most_improved_schools
- Najera, M. J. (2010). *Sustainability in higher education. An explorative approach on sustainable behavior in two universities* (Doctoral dissertation, Erasmus University, Rotterdam, The Netherlands).
- OECD. (2014). Teaching and Learning International Survey [TALIS] 2013 Technical Report. OECD Publishing. Retrieved from <http://www.oecd.org/edu/school/TALIS-technical-report-2013.pdf>
- Peček, M., & Macura-Milovanović, S. (2012). Who is responsible for vulnerable students? The attitudes of teacher candidates in Serbia and Slovenia. *European Journal of Teacher Education*, 35(3), 327-346. <http://dx.doi.org/10.1080/02619768.2012.686105>
- Pervin, A. L., & John, P. O. (1997). *Personality: Theory and research* (7th ed.) New York: John Wiley & Sons.
- Petrovici, C. (2007). Competences of didactic profession—taxonomic models. *Analele Științifice ale Universității, Alexandru Ioan Cuza"—Secț. Științele Educației*, 11, 1-10.
- Pintrich, P. R. (2004). A Conceptual Framework for Assessing Motivation and Self-Regulated Learning in College Students. *Educational Psychology*, 16(4), 385-407. <http://dx.doi.org/10.1007/s10648-004-0006-x>
- Rauch, F., & Steiner, R. (2013). Competences for education for sustainable development in teacher education. *CEPS Journal*, 3(1), 9-24.
- Rieckmann, M. (2012). Future-oriented higher education: Which key competencies should be fostered through university teaching and learning? *Futures*, 44(2), 127-135. <http://dx.doi.org/10.1016/j.futures.2011.09.005>
- Rodgers, C. (2002). Defining reflection: Another look at John Dewey and reflective thinking. *Teachers College Record*, 104(4), 842-866. <http://dx.doi.org/10.1111/1467-9620.00181>
- Schon, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schon, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the*

- professions*. San Francisco: Jossey-Bass.
- Scruggs, T. E., & Mastropieri, M. A. (1996). Teacher perceptions of mainstreaming/inclusion, 1958-1995: A research synthesis. *Exceptional Children*, 63(1), 59-74. Retrieved from <http://www.questia.com/library/journal/1G1-18761568/teacher-perceptions-of-mainstreaming-inclusion-1958-1995>
- Sims, L., & Falkenberg, T. (2013). Developing competencies for education for sustainable development: A case study of Canadian faculties of education. *International Journal of Higher Education*, 2(4), 1-14. <http://dx.doi.org/10.5430/ijhe.v2n4p1>
- Skočić-Mihić, S. (2011). *Spremnost odgajatelja i faktori podrške za uspješno uključivanje djece s teškoćama u rani i predškolski odgoj i obrazovanje* (Unpublished Doctoral dissertation). University of Zagreb, Faculty of Education and Rehabilitation Sciences, Croatia.
- Sleurs, W. (Ed.). (2008). *Competencies for ESD (Education for Sustainable development) teachers. A framework to integrate ESD in the curriculum of teacher training institutes* (Comenius 2.1 project 118277-CP-1-2004-BE-Comenius-C2.1). Brussels, Belgium. Retrieved from <http://www.unece.org/fileadmin/DAM/env/esd/inf.meeting.docs/EGonInd/8mtg/CSCT%20HandboExtract.pdf>
- Tatalović-Vorkapić, S. (2012). The significance of preschool teacher's personality in early childhood education: Analysis of Eysenck's and Big Five Dimensions of personality. *International Journal of Psychology and Behavioral Sciences*, 2(2), 28-37. <http://dx.doi.org/10.5923/j.ijpbs.20120202.05>
- Tatalović-Vorkapić, S., & Lončarić, D. (2013). Posreduje li profesionalno sagorijevanje učinke osobina ličnosti na zadovoljstvo životom odgajatelja predškolske djece? [Does Professional Burnout Mediate the Effects of Personality Traits on Life Satisfaction among Preschool Teachers?]. *Psihologijske teme*, 22(3), 431-445.
- Thematic Working Group "Teacher Professional Development". (2013). *Supporting teacher competence development for better learning outcomes*. Brussels: European Commission.
- Tiana, A. (2004). Developing key competencies in education systems: some lessons from international studies and national experiences. In D. S. Rychen, & A. Tiana (Eds.), *Developing key competencies in education: Some lessons from international and national experiences* (pp. 35-80). Geneva: UNESCO/International Bureau of Education.
- UNESCO. (2005). *Guidelines for Inclusion: Ensuring access to education for all*. Retrieved from <http://unesdoc.unesco.org/images/0014/001402/140224e.pdf>
- UNESCO. (2008). *Defining an Inclusive Education Agenda: Reflections around the 48th Session of the International Conference on Education*. Geneva. Retrieved from <http://unesdoc.unesco.org/images/0018/001868/186807e.pdf>
- UNESCO. (2009). *Policy Guidelines on Inclusion in Education*. Retrieved from <http://unesdoc.unesco.org/images/0017/001778/177849e.pdf>
- Van Laarhoven, T. R., Munk, D. D., Lynch, K., Bosma, J., & Rouse, J. (2007). A Model for Preparing Special and General Education Preservice Teachers for Inclusive Education. *Journal of Teacher Education*, 58(5), 440-455. <http://dx.doi.org/10.1177/0022487107306803>
- Vizek-Vidović, V. (Ed.). (2011). Profesionalni razvoj učitelja. In V. Vizek Vidović (Ed.), *Učitelji i njihovi mentori—uloga mentora u profesionalnom razvoju učitelja* (pp. 39-96). Zagreb: Institut za društvena istraživanja.
- Vizek-Vidović, V., & Velkovski, Z. (Ed.). (2013). *Teaching profession for the 21st century: Advancing Teacher Professionalism for Inclusive, Quality and Relevant Education—ATEPIE*. Belgrade: Centre for Education Policy. Retrieved from http://www.cep.edu.rs/public/teaching_profession_for_the_21st_century.pdf
- Vizek-Vidović, V., Vlahović-Štetić, V., Rijavec, M. & Miljković, D. (2003). *Psihologija obrazovanja* (Educational Psychology. In Croatian). IEP-Vern, Zagreb.
- Wals, A. E. J. (2010). Mirroring, Gestaltswitching and transformative social learning. Stepping stones for developing sustainability competence. *International Journal of Sustainability in Higher Education*, 11(4), 380-390. <http://dx.doi.org/10.1108/14676371011077595>
- Williams, M. K., & Foulger, T. S. (2009). Preparing Preservice Teachers for 21st century classrooms: Transforming Attitudes and Behaviors About innovative Technology. *Journal of Technology and Teacher Education*, 17, 393-418. Retrieved from <http://www.edlib.org/p/28216/>

- Yano, S. (2013). *Mapping Transversal/Non-Cognitive Skills in Education*. Retrieved from <http://www.unescobkk.org/education/news/article/mapping-transversalnon-cognitive-skills-in-education/>
- Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology, 81*, 329-339. <http://dx.doi.org/10.1037/0022-0663.81.3.329>

Note

Note 1. The term teacher in this paper includes both preschool and elementary school teachers, and refers equally to both genders regardless if this term was used to refer to a male or female teacher. The recommended problem area has been insufficiently researched, especially in the Croatian socio-cultural context, and there is significant room for improvement in the area of interdisciplinary and cross-cultural research. Significant attention has been given to these questions in the EU and national policy documents.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).