Role of Communication in Classroom Management

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ABSTRACT In literature, teaching climate is closely related to be connected to school performance, such as students' achievement, engaging, confidence, classroom discipline and school effectiveness. This paper analyzes teaching climate in relation to teachers' communication style, personality traits and type of school. The study was conducted during 2016 in primary and secondary schools in Serbia on 221 teachers. Multivariate analysis of covariance was used for the prediction of teaching climate in relation to predictor variables. The results suggest that assessment of relations student-student and student-teacher should be considered primarily in the context of teachers' communication profile and some personality traits. The results are relevant to the researchers, theoreticians and practitioners in the field of classroom management, school administration and educational psychology, as they provide the insight into the correlation of given concepts as well as guidelines for improving the educational process.

INTRODUCTION

Teaching (or classroom) climate usually occurs in a context of learning environment, and is identified more closely by concepts such as milieu, social environment or atmosphere that determine the relationship between two main participants in teaching process: teachers and students. This phenomenon is seen mostly as the complex system of creating and maintaining an environment that facilitates the process of teaching and learning, and in theoretical analysis as well as its practical manifestations it varies from closed to open (Domovic 2003) – from hostile or negative to positive or supportive. Due to its high influence on a teaching process, it is primarily related to its effectiveness and to educational effects in general. It is therefore considered as one of the most important social and cultural factors of educational outcomes.

Teaching climate is a complex set of conditions, dimensions, relations and properties that function in a classroom and have direct and indirect impacts on a learning group's structure and behavior, while communication, conflict, influence, power and value are highly significant.

In theoretical discussions, teaching climate is observed in relation to teachers' and students' type of personality, but is also connected with a teaching style which considerably affects the atmosphere, communication, interaction, engagement, behavior and motivation of students.

Apart from classroom management, as recognizable factor of its shaping, teaching climate can be caused by the action of other factors not related to classroom, such as leadership style of school principal that may determine the character of entire school culture. Numerous studies indicate the strong relationship between educational climate and principals' leadership style, levels of education reform, professional burnout of teachers and overall school culture (Fraser 1998; Freiberg 1999; Domovic 2003). Given that teaching climate occurs as a result of the significant number of social factors, it is extremely variable and changes every day, throughout the entire school year.

When it comes to implementation of classroom management principles in practice, conclusions derived from research on teaching climate are shown to be directions for defining professional standards for teachers. Egeberg et al. (2016) investigated the consistency between recommendations from the research literature and

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professional standards for teachers and their formal education, in regards to classroom management. Authors identified that in Australia, gratefully, recommendations regarding classroom management were followed by tree specific standards for the accreditation of study programs of teachers' education (2013). This study indicates that this field of research is highly important, relevant and that it (can) make direct effect on educational improvements.

Researches on this phenomenon nowadays gain new dimension which is related to the concepts far behind the traditional interactive learning. The era of digitization and information has set perhaps the greatest challenge before education. Schools are nowadays "facing challenges to make new learning opportunities forced by the new technologies" (Cezmi Savas et al. 2013: 417). New generation of students are emerging, students that grow up differently, learn to perceive differently, think and reason differently, have a different, almost revolutionary approach to education – the generation of so called digital natives. In these circumstances, the question arises as to whether the effects of learning are still determined by interpersonal relations, such as teaching climate or its impact is reducing in favor to some new digital and alternative dimensions? Do motivation, engagement and academic achievement of students that belong to the new generation of digital natives – students which create considerable part of their social relationships online, into virtual world – remain shaped by the climate that teachers create in a classroom?

In relation to these questions and dilemmas, the most recent studies show opposing results. A recent study by Akin et al. (2016) exploring teachers' classroom management practice in Turkey, has shown that teachers in elementary schools use a range of different practices regarding teaching climate to establish effective classroom management structure and have positive perceptions on teaching climate and classroom management issues. Another study suggests that no positive classroom climate is possible if teacher lacks communicational competences (Webb and Barrett 2014), and moreover, that strong bond between students built on the grounds of positive teaching climate, has positive effect on learning outcomes (Sidelinger et al. 2012). On the other hand, a comprehensive qualitative study on high school in USA shows that it is still quite a challenge for contemporary teachers (Schiffler 2016): it identified classroom management as a significant stressor in a teachers' practice. Another recent study conducted in elementary schools in Austria has shown that teachers lack adequate techniques for improving classroom climate (Sieberer-Nagler 2016). It seems that further and more detailed investigation is needed, with additional identification of factors that affects teaching climate.

In order to respond to these challenges and to provide a more contemporary dimension to these significant issues, a survey on educational climate was conducted during 2016 in randomly selected primary and secondary schools in Serbia. Taking into account Dorman's view point, which advocates the observation of teaching climate from the perspective of different variables, as well as Fraser's work, who observed this concept from the perspective of socio-demographic characteristics of respondents (including a school type); the research presented in this paper explores the phenomenon of teaching climate in the light of communication style and personality traits of teachers. Therefore, this paper presents the results of prediction analysis of teaching climate from the perspective of teachers, in relation to their communication profile, personality traits and the type of school they work in. A range of different, already identified set of important variables for the observation of teaching climate, as well as contemporary dimension to this highly important issue give this research a justifiable relevance and pertinence.

The results of this research could be relevant to the researchers, theoreticians and practitioners in the field of classroom management, school administration and educational psychology, as it provides the insight into the correlation of given concepts as well as guidelines for improving educational process.

A Review of Research on Teaching Climate

Research on teaching climate have begun in the United States with the works of Moos (1987a, b) and Walberg (1968, 1976, 1991) since the 1960s, after which this research field had been significantly expanded in a number of Fraser's works (1998, 1991, 1993, 1994, 1995). Many studies point to the strong relationship between teaching climate and school performance, such as students'

academic achievement, confidence, behavior, commitment and self-efficacy; as well as to its connection with leadership style of school principals, the level of educational reform, occupational burnout of teachers and school culture in general (Fraser 1998; Freiberg 1999; Frisby and Martin 2010; Sidelinger et al. 2012; Webb and Barrett 2014; Barr 2016).

A number of authors, in a lead of authorities in this field such as Fulan (2002, 2007a, b, 2010) and Leithwood (1992, 1990, 1984, 1991), have pointed out that educational effectiveness depends on a range of factors that reflect teachers' general position in a society and in the institution they work in. Moreover, organizational culture, often stressed as a factor affecting the teaching climate, is indentified as a system of values, beliefs, norms, ideologies, rituals, traditions of the organization itself (often associated with school management style); as well as national, social and cultural milieu of the wider environment beyond the school (Adelman and Taylor 2005). "The culture of an educational institution [...] conditions its successfulness and capability for changes and transformations set before it" (Arsenijevic et al. 2009: 522).

One research study shows that higher achievements of students occur in classes with greater cohesion, better organization and with less conflict (Adelman and Taylor 2005). Goh and Fraser have shown the correlation between students' cognitive and affective outcomes and students' and teachers' interaction in 39 primary schools in Singapore, so that the higher cognitive results were achieved in classes with better leadership, atmosphere of friendship and teachers' behavior that indicates an understanding and empathy for students. Affective outcomes (students' motivation and engagement) were more pronounced in stronger cohesion among students and in class with reduced conflict (Goh and Fraser 1998). Moreover, Dorman et al. (2002) showed a positive correlation between the climate on classes of religious content and students' attitudes towards Christianity in a study of more than 1300 students in 17 Catholic high schools in Sydney. Similarly, researches on "pedagogical content knowledge" (PCK – ways how teachers represent the subject matter in a context of facilitating student learning, defined by Shulman 1986) have shown positive relationship between teacher PCK and student achievement in mathematical, biological and science educa-

tion (Ogletree 2007; Lenhart 2010; Usak et al. 2013). Usak et al. pointed that candidates who enrolled student-centered class "had or at least tended to have more positive attitudes toward Biology" and "higher achievement in the Biology course" than those who enrolled teacher-centered class (2013: 251).

As a result of the meta-analysis of studies on teaching climate and learning environment, Dorman (2002) points out that research in which it is considered as dependent variable are more successful and informative. Fraser (1998b), an author who has left the most significant footprint in English-speaking literature in the field of teaching climate, has shown that it varies according to the type of school, grade year and a field of study. It is particularly interesting that teachers give much higher assessment of teaching climate than students do. For example, in the research on more than one hundred grades of secondary schools and their teachers in Queensland, Dorman (1997) showed a significant difference between the perceptions of teachers and students at all the variables: engagement, interaction, cooperation, focus on the task, organization, individualization and control. Similar findings, as pointed out by Dorman, were obtained in the US, Israel, the Netherlands and Australia (Fraser 1998b according to Dorman 2002).

Research on the effectiveness of teaching climate has a long tradition and rich history. Many studies have confirmed the earlier theoretical assumptions about its impact on the effects of teaching and learning, as well as the importance of communication and socio-demographic factors in determining educational climate. There are many researchers who analyze the social and emotional dimension of teaching climate and combine them with students' and teachers' attitudes, interaction, communication and social reversibility established by communication (Bratanic 1990, 1997, 2002; Domovic 2003; Bjekic 2007). One qualitative research has shown that lack of motivation and emotional exhaustion are the two of five factors determining teachers' ineffectiveness (Cesmi Savas et al. 2013). Personality of teachers as creators of teaching climate should therefore be included as a relevant research aspect, which has been insufficiently established in the literature. Personality traits are very important determinants of human behavior, reasoning and approach to work and life. Studies such as Stojiljkovic (2014)

and Arsenijevic and Andevski (2012, 2013) showed that there is a relationship of some personality traits with professional stress, leadership and pedagogical characteristics of teachers, and that deepening the current knowledge in this area would be justified and useful.

The theoretical and analytical research study called *Visible Learning - A Synthesis of over 800 Meta Analyses relating to Achievement* (2009) by John Hattie, gave the firmer knowledge on positive and negative effects on school learning, providing arguments based on more than 50.000 original studies and on 240 million participants. Hattie's main intention was to define the key features ("intel inside" learning process), which would enable learning to be visible from inside. Hattie was investigating what kind of effects individual factors would have on student learning and, conclusively, has pointed on the impact of family, school, teachers, curriculum and, above all, on concrete teaching measures (2009, 2011, 2014a, b). In this way Hattie gave incentives to teachers to the process of systematic observation, self-evaluation and self-reflection, and emphasised the importance of communication in a teaching process: as an interaction between those who teach and those who learn.

METHODOLOGY

Aim and Method of Research

The aim of this paper is a prediction of teaching climate based on the teachers' communication profile, personality traits and the type of school.

Measurements and analysis have a quantitative degree with full objectivity. Following statistical analysis were used: descriptive statistics, Cronbach's alpha coefficient (the measurement of scales reliability) and Cattell's SCREE test. Multivariate analysis of covariance (MANCOVA) was used for prediction of teaching climate in relation to a series of continuous and categorical predictor variables.

Research Sample

The survey was conducted from January to May 2016 in randomly selected primary and secondary schools in The Republic of Serbia; it was anonymous, with no time limitations and with the consent of schools' management.

221 teachers employed in those primary and secondary schools agreed to be involved in the study. There were more female teachers (66.8%) and those working in secondary schools (60.6%). Age ranged from 25 to 63 years, with an average of 42.7 years (SD = 9.05). Almost half of the participants were aged 30-45 years (48.9%), followed by a slightly smaller group of the age over 45 years (35.5%) while those younger than 35 years form the smallest group (12.7%). Length of service moves in the range of 1 to 40 years with an average of 15.1 years (SD = 8.68).

Research Instruments

The study includes a number of the following instruments:

Big Five Plus Two (Colovic et al. 2014) was used in order to measure the dimensions of personality traits of teachers. The instrument contains seven scales with 10 items: Neuroticism (reliability scale α = .85), Extraversion ($\acute{a}$ = .83), Aggressiveness (α = .82), Conscientiousness (α = .81), Openness (α = .77), Positive valence (α = .81) and Negative valence (α = .81). Content dimension Neuroticism refers to a tendency to negative affect, depressed mood and anxiety. Extraversion largely involves sociability and warmth, while the indicators are positive affect slightly less represented. Aggression involves anger, cynicism, selfishness and antagonism, suspicion of the other people's intentions, as opposed to trust, altruism, compassion and the need to help others. Conscientiousness includes indicators of persistence, perseverance and responsible attitude toward commitments, as opposed to indolence and lack of self-discipline. Openness to experience predominantly contains indicators of intellectual curiosity and orientation of artistic content, and strives for thrills to a lesser extent. The Positive valence refers mostly to narcissistic tendencies, while predominantly Negative valence describes inclination to manipulative behavior (Colovic et al. 2014). Five-point Likert scale of answers was provided.

Diagnosis of Teaching Climate provides teachers' assessment of the relationship between teachers and students and among students themselves. The instrument is based on questionnaires of Gert Lohmann, modified and adapted to the particularities of this research.

The questionnaire contains 18 questions, including 9 questions about relationship student-teacher and 9 questions for assessing relationship student-student (2007: 189-190). Principal component analysis was used in order to identify the latent structure of the questionnaire. After the elimination of all the items with loadings on multiple factors, two-component solution was obtained. The first component consists of items describing positive relationships among students (reliability α = .91), while the second gathers the items about positive attitude of students and teachers (reliability α = .80). High scores on first component suggest that there is no mobbing among students, that students communicate with each other friendly, help and treat each other with respect, that there are no outsiders, that students feel comfortable in class, are committed to each other, and that there is no pressure or competition. High score on second component suggest that students respect and treat their teachers friendly and with affection, talk to them when they have personal problems, teachers have positive attitude on teaching and, in general, students are not afraid of their teachers (for detailed results of the principal component analysis see the study Andevski et al. 2015).

Teachers' Communication Profile is based on questionnaire of Gert Lohmann (2007: 197-198). The questionnaire contains 48 questions of the teachers' evaluation on their communication in the classroom. Principle component analysis resulted in one-factor solution, which consists of 14 items relating to warm communication profile (reliability, α = .80). High scores on this component suggest that teachers listen to students who wish to confide in them, talk to students about matters in which they disagree, are friendly to students, patient, willing to re-explain teaching content, cherish humor, help students to solve problems, react patiently on distractions and talk about their subject with enthusiasm (Andevski et al. 2015).

RESULTS

In order to make prediction of teaching climate in relation to communication profile, personality traits and type of school, multivariate analysis of covariance (MANCOVA) was applied. Criterion variables represent two dimensions of teaching climate - *positive relations among students* and the *positive relationship between students and teachers*. Continuous predictor variables represent seven personality traits and teachers' warm communication profile. Categorical predictors are gender, type of school (primary or secondary) and length of service (10 years, 10-20 years and more than 20 years).

Results showed that significant multivariate effect have following predictors: type of school ($F (2, 173) = 5.3$, $p <.01$), warm communication profile ($F (2, 173) = 28.84$, $p <.001$) and, among personality traits, extraversion ($F (2, 173) = 8.59$, $p <.001$) and openness to experience ($F (2, 173) = 3.16$, $p <.05$). As for the univariate effects, the results showed that following predictors achieved significant effect on the dimension *positive relationship among students*: type of school ($F (3,251) = 7.81$, $p <.01$), warm communication profile ($F (3, 251) = 19.77$, $p < .001$), extraversion ($F (3, 251) = 8.39$, $p <.01$) and openness to experience ($F (3, 251) = 6.14$, $p <.05$); while significant effect on the dimension *positive relationship between students and teachers* achieved predictors: warm communication profile ($F (3, 251) = 48.60$, $p <.001$) and extroversion ($F (3, 251) = 12.36$, $p <.01$).

Significant contribution to the prediction of dimension *positive relations among students* was achieved by the following predictors*:* the type of school – while teachers from secondary schools estimated relationship between students higher ($M = 3.52$, $SD = .73$) compared to teachers from elementary schools ($M = 3.22$, $SD = .58$); a warm communication profile ($B = .52$, $p <.001$), extroversion ($B = .35$, $p <.01$), as well as the openness to the experience ($B = .29$, $p <.001$). On the other hand, warm communication profile ($B = .55$, $p <.001$) and extroversion ($B = .29$, $p <.01$) achieved significant contribution to the prediction of dimension *positive relationship between teachers and students*, both in a positive direction.

The results indicate that more predictors contribute to the prediction of teaching climate's dimension *positive relations among students* than to the dimension *positive relationship between students and teachers*. According to the teachers' assessment, significant contribution to the prediction of dimension *positive relations among students* have the following predictors: teachers' communication profile, personality traits (extraversion and openness to experience) and type of school, while the contribution to the prediction of *positive relationships between stu-*

dents and teachers have predictors: teachers' communication profile and extroversion (as personality trait). Thus, there are two dominant predictors for predictions of both dimensions of teaching climate: teachers' communication profile and extraversion (personality trait). Teachers with warmer communication profile and those who are more extroverted evaluate student-student and student-teacher relationships as more positive.

School type stands out as a predictor in determining the *positive relations among students*, but not when it comes to *positive relationships between students and teachers*, where teachers in secondary schools give a higher assessment of relationships between students. Teachers believe that the relationship among high school students is more positive than the one in elementary school (Table 1) and this difference in relation to the type of school is attributed to the age of students. One of the possible explanations is that higher scores on relationship between students in high school is the result of students' level of social development, that is, high school students have better relations because they have developed social, personal and affective skills more than students in elementary schools. It is therefore possible that teachers consider themselves less involved in interpersonal relations, and that in accordance with students' developmental perspective, they attribute to students greater personal responsibility in shaping mutual relations.

When it comes to personality traits: the two most prominent teachers' traits as predictors to teaching climate are extroversion and openness to experience. Openness to experience turns out to be a predictor of teaching climate's dimension related to *relations among students*, which means that teachers with more pronounced open-

ness would assess *relationship among students* as more positive. People open to experience usually "readily adopt new ways of doing things, have wide intellectual interests, and tend to be socially and politically liberal" (McCrae and Greenberg 1996: 223). It seems that teachers who have expressed this dimension of personality reflected in imagination, artistic sensitivity, flexibility, intellectual curiosity and unconventional attitudes have a constant need for a different, better and more substantial experience. The set of these teachers' characteristics: enhanced intuition, strive for experience and pronounced flexibility, perceptiveness and creativity – lead them to perceive more from their students and to consider relations as openly as they approach them. That is why it is possible that teachers who are less open and more rigid would estimate that students get along with each other less than open teachers do. Rigid teachers are seemingly less sensitive to communication among students and do not understand it as open teachers do. In essence, they are not able to fully comprehend the phenomenon of school climate.

However, the personality trait which has more substantial contribution to teaching climate (higher intensity and contribution to both dimensions of teaching climate) is extroversion. The results show that extrovert teachers assess student-student and student-teacher relationships as more positive. Extroverted person can be described as follows: sociable, needs people with who can to talk to, loves change, likes humor, always provides ready answer, is carefree and optimistic and always keeps moving and doing something (Knežević et al. 2010). Teachers with this personality trait can be assumed to always take into account the integrity of insti-

Table 1: Partial contribution to the prediction of criterion variables

Categorical predictors:		*Positive relationships among students (R² = .247)*			*Positive relationship between teachers and students (R² = .347)*		
		AS	SD	η_p^2	AS	SD	η_p^2
Type of a school	Elementary	3.22	0.58	-	-	-	-
	Secondary	3.52	0.73	.043	-	-	-
Continuous predictors:		B	p	η_p^2	B	p	η_p^2
Warm communication profile		0.52	0.000	.102	0.55	0.000	.218
Extroversion		0.35	0.004	.046	0.29	0.001	.066
Openness to experience		0.29	0.014	.034	0.08	0.331	-

tutional, human and material constraints in school, and that are able to derive possible activities from them, shape mutual relations, investigate pedagogic possibilities, create and experiment in order to achieve better results. From their determination to re-examine "the most ordinary or unordinary things [...], depends the possibility of breaking routines and encouraging curiosity" (Merije 2014: 86). Extroverted teachers connect their personality trait to warm communication with students and easily achieve relationship that permits students to happily discover the magic of learning.

It is interesting to note that another research conducted in Serbia, examining correlation between personality traits and professional stress in a sample of 200 teachers, has shown a negative correlation between extraversion and openness to experience on one side, and professional stress on the other (Stojiljkovic and Doskovic 2014). Bearing in mind this insight as well as the results presented above, it seems that teachers' extroversion and openness to experience lead to their brighter perception of working climate and less professional stress, which are probably intertwined.

Table 1 shows that the η_p^2 value is highest for the predictor warm communication profile, both in the case of component *positive relations among students* and of the component *positive relationship between students and teachers*, which means that this predictor has the greatest effect on participants' assessment on teaching climate.

Therefore, the dominant predictor of teaching climate is communication profile, beyond teachers' personality traits or the type of school. Results have shown that the value η_p^2 is highest for the predictor warm communication profile both in the case of component *positive relations among students* and of the component *positive relationship between students and teachers*, which means that this predictor has the greatest effect on participants' assessment on teaching climate. Meyer (2005) points out the importance of communication in the process of teaching and learning and in the creation of more effective educational climate. He furthermore establishes meaningful communication in one of the ten most important characteristics of good teaching; where meaningful communication is a process in which students, aided by teachers, give personal meaning to the learning

process and its results (2005). Moreover, communication enables people to involve in social systems, communication and mutual interaction allows people to create mental models of the world, communication enable people to negotiate, set up and accept norms and rules (Andevski et al. 2015).

DISCUSSION

In the study "What is good teaching?" Meyer points out that teaching climate is one of the ten most important criteria of good instruction and describes it as "the human quality of relationships between students and teachers and students with each other" (2005: 47). Principal component analysis conducted in this research has resulted in distinguishing precisely these two components in a space of research dimension: *positive relations between students and teachers* and *positive relationships among students*. As Meyer has pointed out, these dimensions should be theoretically and empirically defined. In this study, an empirical foundation of these important dimensions for the effectiveness of educational process was conducted. Bearing all this in mind, distinction of warm communication profile and teachers' personality traits as predictor variables is completely justified.

Bearing in mind that many studies have confirmed the strong relationship between the educational climate and school performance, such as students' achievement, behavior, confidence, commitment and self-efficacy (Fraser 1998; Freiberg 1999; Frisby and Martin 2010; Sidelinger et al. 2012; Webb and Barrett 2014; Barr 2016); these findings suggest an optimistic conclusion that, when it comes to teaching climate, the improvement of teaching and learning process is less dependent on an unchangeable factors such as teachers' personality traits, or on independent factors such as the type of school, but that mainly depends on the most dominant teachers' feature – communicational profile. As established in theory and practice, communication ability is changeable, and it can be learnt and developed over time. Therefore, results of this research primarily suggest that the development of learning process could be highly feasible through the improvement of teachers' communication abilities. This concussion is underpinned with other empirical findings as well (such as Frisby and Martin 2010; Sidelinger et al. 2012; Webb and

Barrett 2014; Barr 2016). What is more significant is that it is still the case in the educational reality in the era of new technologies, as students become digital natives. It seems that effects of learning are still determined by interpersonal relations in the classroom.

Teachers' communication profile is not, however, only a manifestation of their pedagogical competences, but comes as a consequence of the general climate and culture in educational institution where they work in; as well as of the wider conditions throughout the education system and of the environment in general: the state of empowerment and autonomy of teachers in performing educational process and achieving educational outcomes, their participation in creating educational policy, financial and social status of teachers in society and culture in which they live in, and so on. This idea is underpinned by studies that indicate a strong relationship between educational climate and principals' leadership style, levels of education reform, professional stress and burnout of teachers and overall school culture (Fraser 1998; Freiberg 1999; Domovic 2003). A number of authors, in a lead of authorities in this field such as (2002, 2007a,b, 2010) and Leithwood (1992, 1990, 1984, 1991), have pointed out that educational effectiveness depends on a range of factors that reflect teachers' general position in a society and in the institution they work in. However, the contribution of this research, combined with the insights of similar research, lead to the conclusion that the improvement of teachers' communication competences would result in the improvement of the effectiveness of educational process. This is even more the case as pedagogical communication is not sufficiently represented in teachers' education, both in their tertiary education and in their professional development. In line with this conclusion, recent study on classroom management also showed that, being a significant stressor in teachers' practice, it should be improved through means of teachers' professional development and mentorship (Schiffler 2016).

CONCLUSION

The research results presented in this paper indicate that teaching climate, as an important factor of learning outcome, is mainly determined by teachers' communication profile, followed by extroversion as a personality trait. Bearing in mind that many studies have confirmed the strong relationship between the educational climate and school performance; these findings suggest an optimistic conclusion that, when it comes to teaching climate, the improvement of teaching and learning process is less dependent on an unchangeable factors such as teachers' personality traits, or on independent factors such as a type of school, but that mainly depends on the most dominant teachers' feature – communicational profile.

Teachers' communication profile is not, however, only a manifestation of their pedagogical competences, but comes as a consequence of the general climate and culture in educational institution where they work in; as well as of the wider conditions throughout the education system and of the environment in general. However, the contribution of this research, combined with the insights of similar research, lead to the conclusion that the improvement of teachers' communication competences would result in the improvement of the effectiveness of educational process. This is even more the case as pedagogical communication is not sufficiently represented in teachers' education, both in their tertiary education and in their professional development.

Bearing all this in mind, the results of this study lead to the conclusion that, in order to improve effectiveness of educational process, it is essential to enhance teachers' communication skills. The main recommendation of this paper is that improvement of teachers' communication skills should be a priority for both their tertiary education and lifelong learning. Naturally, complete results are possible only combining measures on the system, managerial and cultural level that change the overall quality of school life.

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