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# classroom management competencies

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# Elementary and Secondary School Students' Perceptions of Teachers' Classroom Management Competencies

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Teachers with proper training in knowledge transfer to different students,  $\sim$ in the creation of suitable learning conditions, the motivation of students for active cooperation and peer learning, in the formation of classroom community, as well as independent and responsible personalities, can provide quality education. Teacher's classroom management competencies largely determine the potential of achieving educational goals and helping pupils form integral personalities. Studies show that teachers lack competencies for classroom management and ensuring discipline in the classroom. In the article, we present the results of empirical study on students' perceptions on teachers' classroom management competencies in two different subjects, mathematics and Slovene language. A total of 907 students from elementary and secondary schools in Slovenia participated in the study. Differences in students' assessments have been established in reference to school level and subject. Students' responses show that secondary school teachers are more focused on achieving educational goals, while aspects of forming a suitable class climate remain less important. The components of quality classroom management (maintenance of supportive learning climate, trusting students) are present in Slovene classes in a larger extent in comparison to maths classes, particularly at the elementary school level. Secondary school students assessed the clarity of rules, student obligations and paying attention in class higher in maths than in Slovene. The results of student's assessment of teacher competencies imply a need for additional research on teachers' classroom management competencies in different curriculum subject.

**Keywords:** classroom management, math classes, Slovene classes, student's perception of teacher competencies, teacher's roles

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# Pogledi učencev osnovnih in srednjih šol na učiteljeve kompetence vodenja razreda

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Kakovostno vzgojo in izobraževanje lahko zagotavljajo samo učitelji,  $\sim$ ki so ustrezno usposobljeni na več področjih - od posredovanja znanja raznolikim učencem, vzpostavljanja ustreznih pogojev za učenje, spodbujanja učencev k aktivnemu sodelovanju in učenju drug od drugega do oblikovanja oddelčne skupnosti ter samostojnih in odgovornih osebnosti. Učiteljeve kompetence vodenja razreda v pomembni meri določajo možnosti za doseganje učnih ciljev in oblikovanje celostne osebnosti učenca. Raziskave kažejo, da so učitelji slabo usposobljeni prav za vodenje razreda in zagotavljanje discipline pri pouku. V članku predstavljamo rezultate empirične študije o učenčevem zaznavanju učiteljevih kompetenc vodenja razreda pri matematiki in slovenščini. V raziskavo je bilo vključenih 907 učencev iz slovenskih osnovnih in srednjih šol. Glede na stopnjo šolanja in predmet poučevanja smo ugotavljali zanimive razlike med ocenami učencev. Odgovori učencev kažejo, da so učitelji v srednji šoli bolj osredinjeni na doseganje izobraževalnih ciljev, medtem ko vidik oblikovanja ustrezne razredne klime ostaja manj pomemben. Dejavnike kakovostnega vodenja razreda (vzpostavljanje podpornega učnega okolja, zaupanje učencem) so učenci v večji meri zaznavali pri pouku slovenščine kot pri pouku matematike, posebej na ravni osnovnošolskega izobraževanja. Dijaki srednjih šol so pri pouku matematike višje kot pri pouku slovenščine ocenjevali učiteljevo jasnost pri postavljanju pravil in šolskih obveznosti učencev ter pri zagotavljanju pozornosti v razredu. Pogledi učencev na učiteljeve kompetence nakazujejo potrebo po dodatnem raziskovanju učiteljevih kompetenc vodenja razreda pri različnih učnih predmetih.

Ključne besede: vodenje razreda, pouk matematike, pouk slovenščine, učenčevo zaznavanje učiteljevih kompetenc, učiteljeve vloge

# Introduction

## Teachers' competencies and their role in modern society

Effective education must stimulate cognitive, motivational, emotional, and social processes in students, as well as declarative and procedural knowledge in the broadest sense. The teacher's working methods, teaching techniques, provision of optimal learning conditions depending on individual student's skills, classroom management styles, attitude towards students, communication, standpoints, values, and co-operation with parents all have a significant impact on student achievement and development of their education. Due to the complexity of all these educational goals (cognitive, motivational, and social) to be achieved by teachers, teaching is becoming one of the most complex professions in modern society. Teachers need knowledge of the relevant areas or professions they teach and adequate pedagogical and psychological knowledge for the quality performance of their work. These skills are tightly interconnected. However, high quality knowledge of subject area alone is not sufficient for successful leadership and support to pupils: knowing how to take into account their individual differences is vital; furthermore, it is not enough to have knowledge from the field of education and psychology without adequate subject knowledge.

Teachers need skills that enable them to help students achieve full potential, which are primarily those enabling them to (European Commission, 2007, p. 12):

- define the needs of each individual student and respond to them by using a wide range of teaching strategies;
- support the development of young people into becoming independent life-long learners;
- help young people obtain competencies listed in the European Reference Framework of Key Competences (Recommendation of the Council and the Parliament 2006/962/EC);
- work in multicultural environments and understand the value of diversity and respect it;
- cooperate closely with colleagues, parents and the broader community.

In the knowledge society, teacher's role should be comprehended generally and not just as teaching the subject. Hagreaves (2003, p. 59) emphasizes that teacher's role is to:

[...] promote social and emotional learning, commitment and character;

learn to relate differently to others, replacing strings of interactions with enduring bonds and relationships; develop cosmopolitan identity; commit to continuous professional and personal development; work and learn in collaborative groups; forge relationships with parents and communities; build emotional understanding; reserve continuity and security, and establish basic trust in people.

Teaching is not only a cognitive and intellectual practice but also a social and emotional one. "Good teachers fully understand that successful teaching and learning only occur when teachers have caring relationships with their students and when their students are emotionally engaged with their learning" (Hargreaves, 2003, p. 60). According to Hargreaves (2003, p. 66) teaching should cultivate "character, community, security, inclusiveness, integrity, cosmopolitan identity, continuity and collective memory, sympathy, democracy, personal and professional maturity", which requires relevant professional qualifications, personal attitude, and commitment, as well as experience of teaching as a mission. Such goals can be achieved by quality student-teacher relationships, which provide a unique entry point for educators and others working to improve the social and learning environments of schools and classrooms.

The Jennings and Greenberg (2009) Prosocial Classroom Model emphasises teachers' socio-emotional competences (SEC), which enable teachers to set the tone of the classroom by developing supportive and encouraging relationships with their students, designing lessons that build on students strengths and abilities, establishing and implementing behavioural guidelines in ways that promote intrinsic motivation, coaching students through conflict situations, encouraging cooperation among students, and acting as a role model for respectful and appropriate communication and exhibitions of prosocial behaviour. Teachers' SEC are an important contributor to the development of supportive teacher-student relationships; they demonstrate more effective classroom management (teachers are more proactive, skilfully using their emotional expressions and verbal support to promote enthusiasm and enjoyment of learning and to guide and manage student behaviours) and they implement social and emotional curricula more effectively because they are role models of desired social and emotional behaviour. Interlinking of all three aspects of the model contributes to creating the appropriate class climate; the latter directly contribute to students' social, emotional and academic outcomes (Jennings & Greenberg, 2009, p. 493). It should be considered that teachers' SEC are affected by different contextual factors inside and outside the school (colleagues' support, head teacher's leadership, school climate, rules, environmental values,

educational opportunities, properties of local and broader community, school legislation, etc.). Student-teacher relationships develop over the course of the school year through a complex intersection of student and teacher beliefs, attitudes, behaviours, and interactions with one another. Hamre and Pianta (2007, p. 57) emphasize that the formation of strong and supportive relationships with teachers allows students to feel safer and more secure in the school setting, feel more competent, make more positive connections with peers, and make greater academic gains.

# Teacher competence of classroom management and student outcomes

In the Model of Teacher Social and Emotional Competence and Classroom and Student Outcomes, Jennings and Greenberg (2009) represent effective classroom management, in addition to teacher-student relationships and effective SEL implementation, as one of the basic views of SEC, formation of relevant class climate and student's social, emotional and academic outcomes. The use of relevant skills of class management promotes prosocial and cooperative behaviours through establishing warm and supportive relationships and communities, assertive limit-setting and guidance, and preventative strategies rather than controlling negative behaviours. Without a positive and stimulating class atmosphere that enables and encourages learning, it is unrealistic to expect high learning achievements, students' commitments to school and academic engagement. Modern curriculum goals, such as encouraging a critical approach, initiative, originality, and problem solving, can only be achieved in a suitable school climate, which integrates the climate of a particular class. In this paper, we pay attention to students' perceptions of teachers' classroom management competencies. We understand classroom management within the wider context of school climate, which are always interdependent and influence each other. The research did not include the study of school climate; therefore, we consider this fact in the interpretation of results and rely solely on the established facts.

The quality of social relations may affect students' goals. Hamre and Pianta (2001), who established the effect of early relationships with the teacher in pre-school on social and academic achievement until the eighth grade, showed just how long-term these effects can be. The dimension of negative relationship with the teacher (conflict and excessive dependence of children) was negatively associated with the desired behaviour (working habits, listening, learning habits), behavioural problems (distraction in the classroom, absenteeism, aggressive behaviour) and academic achievements through the eight years of schooling.

The most significant effect of the student's interpersonal experience with teachers is through the perception and interpretation of students themselves. Many studies showed that the perception of the teacher's classroom management is associated with motivation, social processes and achievement (Bong, 2005; Furrer & Skinner, 2003; Huges et al., 2008; Lau & Nie, 2008; Patrick, Ryan, & Kaplan, 2007; Turner et al., 2002; Urdan, 2004; Wentzel, 1998).

Marchant, Paulson and Rothlisberg (2001) studied American primary school pupils and determined that teachers' behaviour in the classroom as shown in their interest and support to pupils' activities and their settling the rules and consistent use of disciplinary strategies affect pupil's internal and external motivation in learning and pupil's perception of learning competency.

The research showed that teacher competencies in the classroom did not affect pupils' outcomes directly but indirectly by stimulating their positive attitude towards learning and giving such feedback that pupils become aware of apparent successful learning. Wentzel (2002) reported on similar findings and highlighted two critical dimensions that affect students' motivational beliefs and their behaviour in the classroom: the teacher's high expectations of pupil achievements (in the sense of expectation that students truly take advantage of all potentials for learning) and the type of feedback that teachers give their pupils on their learning and academic achievements. In the study, the author notes that the mentioned teacher competencies have a positive impact on the pupil's interest in learning, orientation in the management of learning content, learner's responsibility to follow the rules in the classroom, and the learning success. A negative giving of feedback was associated with a lower liability for obeying the rules in the classroom, a low degree of prosocial behaviour in the classroom (in terms of providing assistance to the other), a greater degree of irresponsible, aggressive behaviour, and lower academic achievements.

Dutch psychologist Wubbels was one of the few researchers who systematically studied the effects of teacher competencies on academic and psychosocial achievements of pupils in Europe in previous decades. In his studies (e.g. Wubbels & Levy, 1993), he stipulated that the dimensions of teacher behaviour in the classroom could be divided into two basic dimensions that displayed the level of teachers' influence in the classroom and their communication with pupils. Based on those two dimensions, Wubbels and his colleagues operationalized eight basic dimensions of teacher behaviour in the classroom. He constructed a questionnaire to measure these dimensions which could also be answered by pupils (pupils assess the competencies of their teachers). The study showed that particularly good teacher classroom management, readiness to assist students in learning activities, cooperative and empathic relationship with students, and setting the rules in the classroom contributed to improving the academic achievement of students. Motivational and social emotional aspect of learning (classroom climate, the willingness of mutual cooperation, satisfaction with teaching) announced a dimension allowing autonomy of learners. In a study in which we studied the impact of teacher competencies on learning achievements and attitudes towards learning in Slovene primary and secondary schools, we found that primary school pupils perceived more support and assistance in learning and a greater degree of autonomy in learning activities as secondary school students (Puklek Levpušček, 2004). Teachers' support for learning and tolerance to independent work are important predictors of pupils' perception of their own teaching effectiveness and intrinsic motivation for learning.

Brophy (2006) reports that empirical studies on classroom management in the 20<sup>th</sup> century showed interesting shifts in various areas, from interactions with individual students and management of the class as a group to instilling learning community principles in the school as a whole; "from reactive discipline to proactive classroom management procedures, from managing behaviour (conduct) to managing engagement in activities (learning); and from unilateral teacher control to development of students' capacities for exercising responsibility and self-regulation" (Brophy, 2006, p. 39). He also emphasizes that effective classroom management that takes into account students expectations and helps students to achieve them is more efficient than the management that is directed to misbehaviour and accentuates "after-the-fact discipline than before-the-fact prevention" (ibid. p. 40). The system of management should support the system of instruction. Management is in service of the educational process and should, therefore, foster active learning, critical thinking, higher order thinking, and the social construction of knowledge in students. We ought to be aware that management emerges from achievement gains or goals that we want to achieve and from our consideration about how to activate students to achieve these goals and about the teacher role in this process (direction, support, optimal goals, feedback during learning process and the role of learning groups and collaboration among students in the class). Many authors (Hattie, 2009; Martin, Sugarman, & McNamara, 2000; Marzano, 2003; Tartwijk, Brekelmans, & Wubbels, 1998; Wentzel, 2002; Wubbels, Brekelmans, & Hoolymayers, 1991) emphasize the importance of suitable classroom management as the key element of quality educational work, including achieving the set educational goals in terms of student socialization and integral formation of each individual's character. Wang, Haertel and Walberg (1993), conducted

a comprehensive study in which they formed a list of 228 variables that affect students' achievements. One hundred and thirty-four experts in the field of education assessed the impact of each variable, and classroom management ranked first. A chaotic classroom is the result of poor management and not only fails to stimulate achievement but also even inhibits it. The teacher's behaviour in class is linked to students' learning achievements as well as to their learning motivation (Evertson & Weinstein, 2006; Tartwijk, et al., 1998; Wubbels, et al., 1991). Motivation for a subject is particularly stirred by dimensions of teacher's behaviour in class, such as encouraging students' initiative and responsibility, their empathy towards students, helping students, and structured class management (Wubbels et al., 1991). Wentzel (2002) defines connections of teacher's behaviour in class with learning achievement of students in varied age groups. Higher learning motivation, better learning achievements and socially responsible student behaviour depend particularly on the teacher's firmly expressed expectations regarding students' learning achievements, taking into account individual differences between students, and giving constructive and encouraging feedback (ibid.).

Even though the significance of classroom management is obvious, Marzano (2003) believes that it is difficult to define. Doyle (1986, as cited in Marzano, 2003, p. 394) defined classroom management as "covering a wide range of teacher duties from distributing resources to students, accounting for student attendance and school property, enforcing compliance with rules and procedures to grouping students for instruction". Brophy (1996, as cited in Marzano, 2003, p. 5) defines classroom management as "actions taken to create and maintain a learning environment conductive to successful instruction (arranging the physical environment of the classroom, establishing rules and procedures, maintaining attention to lessons and engagement in academic activities)". Marzano (2003, p. 88) defines classroom management as "the confluence of teacher actions in four distinct areas: establishing and enforcing rules and procedures, carrying out disciplinary actions, maintaining effective teacher and student relationships and maintaining an appropriate mental set for management". Only when effective practices in these four areas are employed and acting coordinated is a classroom effectively managed. Similarly, Martin, Sugarman and McNamara (2000) emphasize that classroom management includes all those teacher's class activities that help to establish a positive class climate enabling learning and teaching processes to take place. Therefore, effective management cannot be studied separately from teaching. Evertson and Weinstein (2006) stress the importance of classroom management, which represent the "actions teachers take to create an environment that supports and facilitates both academic and social-emotional learning" (ibid., p. 4). This means that teachers carry out a number of specific tasks: 1) develop caring, supportive relationships with and among students; 2) organize and implement instruction in ways that optimize students' access to learning; 3) use group management methods that encourage students' engagement in academic tasks; 4) promote the development of students' social and self-regulation; and 5) use appropriate interventions to assist students with behaviour problems.

Classroom management can never be focused solely on the provision of adequate discipline conditions for learning and teaching, but it is significantly related to the teacher's planning of learning activities of students, cooperation among them, learning from each other, and providing quality feedback to individuals and learning groups in achieving educational goals. Therefore, teachers should have proper skills, especially in the face of a great diversity of students in the classroom, proceeding from the inclusion of students with special needs and gifted students. Teachers should know which strategies to be used in accordance with the characteristics of a group or a class (younger or older students (Emmer & Gerwels, 2006), inclusive classes (Soodak & McCarthy, 2006), teacher-student relations and relations among students (Pianta, 2006), relations between students' rights and teachers' authority (Schimmel, 2006).

Work in an individual class and its relationship dynamics largely depend on the overall school climate, and culture. The organizational climate reveals how individual members of the social system perceive their work environment and how they feel in it (Bečaj, 1999, p. 163). The way people behave is largely defined by their perception or their understanding of the environment in which they find themselves. Therefore, social climate not only refers to how persons feel, but also to their way of perceiving and experiencing deeds, relations, and other people. A school's culture is important because it can affect students' learning and behaviour (Anderson, 1982; Dupper & Meyer-Adams, 2002 as cited in Stewart, 2007; Wang, Haertel, & Walberg, 1997 as cited in Stewart, 2007). Cohen, McCabe, Michelli and Pickeral (2009, as cited in Fan, Williams, & Corkin, 2011, p. 632) defined school climate "as the character and quality of life within a school that is shaped by its organizational structure, physical environment, instructional practice, interpersonal relationships, and overarching values, objective, and customs." Research has shown that students' sense of belonging influences academic achievement (Ma, 2003 as cited in Stewart, 2007; Radovan, 2011). Based on their longitudinal study of the Chicago Public Schools, Bryk and Schneider (2002, as cited in Stansberry Beard, Hoy & Woolfolk Hoy, 2010) explain that there are at least four social conditions in schools that directly promote student learning: 1) teachers with a "can do" attitude, 2) school outreach to

parents, 3) a professional community emphasizing collaborative work practices with a commitment to improving, and 4) high expectations.

Both teachers and pupils are directly included in the institution and, by co-existing therein, they (co)design its culture and climate through their values, attitudes and actions. At the same time, the institution, with the characteristics of its culture and climate, affects persons. Bečaj (2001) stresses that formation of school culture with an emphasis on tolerance, solidarity and cooperation, requires systematic and planned work. Every social community is a living organism with its own needs that operates according to its own rules. Consequently, such a community has to be formed first, then its ability of quality operation has to be maintained; the latter can only be the result of planned and continuous work (ibid.). Since students spend the most time together in class, it is sensible to ask what educational features foster a cooperative climate, respect for people, and enable a teacher and students to co-design and actively participate in the educational process. It is important to be aware of the way that a teacher maintains student attention during class, of how clearly defined rules of cooperation and individual duties are, of the way discipline issues are resolved, to what extent students experience their teacher's stimulation to express their own opinions and suggestions, of the way the teacher forms the general atmosphere in the classroom: whether this is the case of a cooperative climate where students support each other in achieving their goals or there is a culture of competition where individual goals and achievements predominate. In other words, it is necessary to create such an educational climate in the classroom that will strengthen the responsibility of students (teachers and parents) towards oneself and others in the class (Hočevar, 2009, p. 213).

Students' motivation and their work depend greatly on work conditions in the classroom, its culture and climate, trust between students and students and teachers, their cooperation, and established relations. Through his or her class management, the teacher also affects all these factors. It is, therefore, important for the teacher to be aware of this, to develop his or her competencies of managing students, and to allow students to realise their study goals and achieve personal development through planned work.

# **Research Problem and Research Questions**

For the development of pre-service and in-service teacher training, it is necessary to know teachers' competencies and their impact on the process among students at different levels of schooling. We were focused on the operationalisation of those teacher competencies by which we can determine the teacher's classroom management efficacy.

The basic aim of the study was to determine which substantive changes are necessary in the process of teacher education in order to provide a quality education to pupils and students, which will equip them to meet the challenges of the future via the creative and innovative use of the knowledge acquired in the conditions of constant changes.

In the research, we studied the differences between students of elementary and secondary schools in their perception of teacher competencies, their motivation and behaviour, and academic achievements. We were interested in determining how teacher competencies are expressed in the class and how teacher conduct is perceived by elementary and secondary school students. Teacher competencies were studied in two basic school subjects that students encounter every day at school and are provided with several hours of teaching in the curriculum. In our opinion, therefore, among all the subjects they can affect the cognitive, motivational-emotional and social development of pupils in the school. Teacher competencies and their impacts are studied in the Slovene language and mathematics.

The study was part of a broader project entitled *Teacher Education for New Competencies for the Knowledge Society and the Role of these Competencies in Educational Goal Attainment at School* (Peklaj et al., 2008). In this paper, only findings related to the following research questions are presented:

- How do elementary and secondary school students assess their teachers' class management competencies in Slovene and maths classes?
- 2. Are there any significant differences in assessments of teachers' classroom management competencies between Slovene and maths classes?
- 3. Are there any significant differences in assessments of teachers' classroom management competencies with regard to the pupils' assessments in the current school year?

#### Method

### Sample

The research included two different samples: seventh-year pupils of the nine-year elementary school (the pupils' average age was 12.8 years) and thirdyear secondary school students (the students' average age was 17.8 years) from urban and suburban environments. We tried to ensure the representativeness of the sample, but in the end, the sample was formed ad hoc because of the complexity of data collection by various instruments, which required more support in schools. The elementary school sample consisted of 470 students (321 boys and 239 girls) from ten Slovene elementary schools. Students were from 26 different classes, and they assessed 13 teachers of mathematics and 14 teachers of the Slovene language. The mathematic teachers have been teaching for 20.04 years on average (SD = 9.87) and the Slovene teachers for 14.28 years (SD = 9.82). The secondary school sample comprised 437 third-grade students (176 boys and 261 girls) from six Slovene secondary schools (the gymnasium programme). Students were from 16 different classes, and they assessed 10 teachers of mathematics and 10 teachers of the Slovene language. The mathematics teachers have on average been teaching for 14.97 years (SD = 7.79) and the Slovene teachers for 22.71 years (SD = 7.06). In total 907 pupils/students were included in the study (407 boys and 500 girls).

#### Instruments

In the research, we first attempled to define teacher competencies that are important for class management and developed a questionnaire with adequate measurement characteristics for the students to assess these competencies (*Kalin et al., Classroom Management Questionnaire*). We constructed a questionnaire that describes teacher competencies so that they could be assessed by pupils as well. We followed the construction of similar questionnaires in other cultural environments (e.g. Wubbles' questionnaire on teacher behaviour in the classroom) and considered some specificities of teacher work in the Slovene school system. Likewise, we considered the existing lists of teacher competencies from previous studies performed in Slovenia (Peklaj, 2006).

The questionnaire comprises the following competencies of teacher classroom management: the didactic and methodical aspect, classroom management, testing and grading, promoting overall development of students, and the use of ICT. Pupils and students evaluated each statement on a four-level scale according to how often a particular behaviour emerges in their maths or Slovene teacher (1 – never, 2 – sometimes, 3 – often, 4 - always). Students

responded for each subject separately.

Below we focus only on one sub-scale: class management. Principal Component Analysis shows that individual scales have a coherent one-component structure. The Cronbach alpha coefficients of reliability for Class management scale in maths for the sample of elementary school pupils is  $\alpha = 0.80$ , while the value for the sample of secondary school students is  $\alpha = 0.74$ . The Cronbach alpha coefficient of reliability for Class management scale in Slovene is 0.84 for the sample of elementary school pupils, and 0.81 for the sample of secondary school students.

We first obtained the consent of the teachers that their students might assess and the consent of the parents that their children may participate in the research. The testing in schools was carried out during regular school hours at the times most suitable for the school from the organisational point of view.

The data from the questionnaires was processed by methods of descriptive and inferential statistics.

# Results

# How do Elementary and Secondary School Students Assess their Teachers' Class Management Competencies in Slovene and Maths Classes?

In the research, assessing teacher's management competencies was limited to questions related to paying attention and concentrating during class, the clarity of rules and student obligations, disciplinary measures, and the establishment of a more relaxed classroom atmosphere, in which students can learn from their own mistakes and where their opinion is valued. All these aspects form a framework in which classes are conducted and are the factors that promote or inhibit learning and teaching. Table 1 presents arithmetic mean values and standard deviations for the items within the classroom management scale, separately by subject and level of education.

## Table 1

Arithmetic mean values and standard deviations for the items within the classroom management scale, separately by subject and level of education

Subject			Slovene			Maths	
Level of educ	ation	Total	Elementary school	Secondary school	Total	Elementary school	Secondary school
1. The teacher is able to have us concentrate and pay attention all the time.	M	2.60	2.84	2.35	2.72	2.86	2.58
	SD	.94	.97	.84	.93	.96	.88
<ol> <li>The teacher has laid down clear rules for our behaviour (we know what the consequences would be if we failed to comply with the rules).</li> </ol>	M SD	2.65 .98	2.86 1.00	2.42 .91	2.87 .96	2.93 .94	2.81 .98
3. The teacher has made our obligations for this subject clear.	M	3.03	3.10	2.94	3.19	3.17	3.21
	SD	.85	.88	.82	.81	.86	.76
4. The teacher strives to make the atmosphere in the class as relaxing as possible.	M	3.03	3.01	3.06	2.60	2.62	2.59
	SD	.91	.88	.91	.97	.98	.95
5. Students are able to share their opinions with the teacher.	M	3.16	3.13	3.20	2.72	2.76	2.69
	SD	.92	.97	.86	1.04	1.04	1.03
6. The teacher encourages us to learn from our mistakes.	M	2.88	2.89	2.86	2.62	2.72	2.52
	SD	.90	.95	.84	.93	1.00	.83
7. The teacher intervenes and helps us resolve any discipline problems.	M	2.85	3.08	2.60	2.73	2.93	2.53
	SD	.97	.92	.95	1.00	1.02	.94
8. The teacher trusts and encourages us.	M	2.96	3.11	2.80	2.68	2.86	2.49
	SD	.89	.93	.81	.94	.97	.87
9. The teacher always tells us what we did right and what we did not.	M	2.99	3.06	2.91	2.89	3.02	2.74
	SD	.85	.88	.81	.86	.90	.79

In class management in <u>Slovene language classes</u>, the average grade above 3 (which means that students perceive such behaviour as frequent) (see Table 1) appears eight times, i.e. with six different items. At the elementary and secondary school level, the average grade above 3 is present in two items: *The teacher strives to make the atmosphere in the class as relaxing as possible*, and *Students are able to share their opinions with the teacher*. Moreover, at the elementary school level, an average grade above 3 is present in the following four items:

- The teacher has made our obligations for this subject clear,
- The teacher intervenes and helps us resolve any discipline problems,
- The teacher trusts and encourages us,
- The teacher always tells us what we did right and what we did not.

Based on the data, it can be concluded that in students' opinions, teachers of Slovene pay great attention to aspects of quality management that do not

involve only appropriate information about learning achievements and prompt feedback regarding attainment of the educational goals. In Slovene, students perceive that teachers strive to form an appropriate learning climate and experience so that they can express their opinions and thus contribute to class dynamics. Literature classes mostly enable as well as presuppose an exchange of opinions, personal experiences of literary works, and communication of the teacher and students as well as students among themselves.

In conducting maths classes, the average grade above 3 (often) appears only three times. At the elementary and secondary school levels, such an average grade appears with respect to the item *The teacher has made our obligations for this subject clear* and reappears at the elementary school level at the statement *The teacher always tells us what we have done well and what not*. No item was assessed below 2.

Based on this data, we can conclude that according to students' assessments with regards to maths, the aspect of achieving educational goals received much more emphasis: clearly set obligations for the subject in both elementary and secondary schools together with the prompt provision of feedback in order to direct students towards achieving their set goals. Hattie and Gan (2010, p. 250) pointed out that feedback is powerful when it makes criteria of success in reaching learning goals transparent to the learner and challenge the learner to invest effort in setting and monitoring learning goals. The learning environment should be open to errors and disconfirmation.

# Are there any significant differences in assessments of teachers' classroom management competencies between Slovene and maths classes?

We were interested in whether elementary and secondary school students statistically significant differently assess class management items in Slovene and maths classes.

## Table 2

Do elementary and secondary schools students statistically significant differently assess class management items in Slovene and maths?

Classroom management	Slovene	Maths	
Items	χ²(2Î) g p	χ²(2Î) g p	
1. The teacher is able to have us concentrate and pay attention all the time.	75.889 3 .000	29.418 3 .000	
<ol> <li>This teacher has laid down clear rules for our behaviour (we know what the consequences would be if we failed to comply with the rules).</li> </ol>	55.161 3 .000	9.418 3 .024	
3. The teacher has made our obligations for this subject clear.	19.816 3 .000	11.707 3 .008	
4. The teacher strives to make the atmosphere in the class as relaxing as possible.	.742 3 .863	2.302 3 .512	
5. Students are able to share their opinions with the teacher.	10.342 3 .016	4.057 3 .255	
6. The teacher encourages us to learn from our mistakes.	12.973 3 .005	40.979 3 .000	
7. The teacher intervenes and helps us resolve any discipline problems.	57.971 3 .000	48.509 3 .000	
8. The teacher trusts and encourages us.	59.871 3 .000	50.656 3 .000	
9. The teacher always tells us what we did right and what we did not.	23.440 3 .000	44.162 3 .000	

When comparing the teaching level, it can be concluded that the assessments of students and pupils show statistically significant differences in eight out of a total nine items, referring to aspects of class management in Slovene classes. Elementary school teaching is evaluated considerably higher in all items; only for the item The teacher strives to make the atmosphere in the class as relaxing as possible, do pupils and students show no statistically significant difference in judgement. At both levels, a high share of answers "always" (pupils 35.6%, students 37.8%) and "often" (pupils 36.3%, students 36.2%) is apparent; however, 6.3% of students and pupils estimate they have never experienced their teacher striving towards a relaxed atmosphere in class. Some questions and concerns originate from the great discrepancies between estimates of pupils and students regarding items on retaining concentration, clear rules about behaviour in class, learning from one's own mistakes, teachers' interventions in resolving discipline problems, as well as on the level of trust and encouragement for students. It seems that secondary school students less often assess that teachers do so regularly or always. The reasons may lie in students' greater independence and responsibility, meaning that teachers find it unnecessary to deal so much with such questions and allow students self-initiative and responsibility to resolve discipline issues. In contrast, this can raise the question whether it may be that secondary school teachers avoid these problems or prefer to leave them to resolve themselves or not at all. In any case, this strongly affects the classroom dynamics, the teaching process and its efficiency. It may also explain the lower learning achievements of students compared to pupils. To obtain more reliable answers, this area should receive more of a different type of attention; the results of our study only indicate some open questions and challenges for everyday education practice and further research.

Do elementary and secondary school students express statistically significant differences in assessing class management items in maths classes? The comparison between students' assessments of class management in elementary and secondary school maths (see Table 2) indicates that elementary and secondary school maths classes show statistically significant differences in seven out of a total nine items. No such difference was noted for the statements, *The teacher strives to make the atmosphere in the class as relaxing as possible* and *Students are able to share their opinions with the teacher*. These items show the same tendency as in the assessment of these items in Slovene classes.

# Are there any significant differences in assessments of teachers' classroom management competencies regarding pupil assessments in the current school year?

Tables 3 and 4 show correlations (Pearson's coefficients of correlation) between perceptions of teacher's class management and pupil assessments in mathematics and Slovene language in elementary and secondary schools.

### Table 3

Correlations between perceptions of teaching management of mathematics/ Slovene language and pupil assessments in mathematics/Slovene language in the current school year in the elementary school

	Assessment in maths (in the current school year)	Assessment in Slovene (in the current school year)		
Class management	.13**	.06		

*Note.* \*\**p* < .01.

A low, statistically significantly positive correlation exists between perceived traits of teacher class management and assessment in mathematics. The perception of teacher class management is related to higher final assessments in mathematics. No statistically significant correlations exist between perceived teacher class management and pupil assessment in Slovene language in elementary school.

#### Table 4

Correlations between perceptions of teaching management of mathematics/ Slovene language and pupil assessments in mathematics/Slovene language in the current school year in secondary school

	Assessment in maths (in the current school year)	Assessment in Slovene (in the current school year)		
Class management	.24***	.16**		

*Note.* \*\**p* < .01, \*\*\**p* < .001.

A low statistically significant positive correlation exists between the perception of teacher class management and assessment in mathematics and Slovene language in the current school year in the elementary school. Higher perceptions of different aspects of management are related to the better learning achievements.

The comparison of the relations between dimension of perceived teacher class management and students' achievements shows that differences exist between pupils in the elementary and secondary schools with regard to the achieved subject assessment. Our results in mathematics and Slovene language in the secondary school are in accordance with the studies that pointed to the low positive relations between dimensions of teacher class management and the formation of motivational structure in the class and learning achievements (Brekelmans et al., 1993; Wentzel, 1998). The results indicate the importance of creating the conditions for the establishment of appropriate climate in the classroom that encourages motivation and higher student achievements, based on the quality of interpersonal relations and classroom climate. Students with better learning achievements, except in Slovene language in elementary school, rated teacher competence in class management higher. Probably the reverse is also true: students who assess teacher competence in class management to a higher degree are willing to invest more effort to achieve better learning outcomes.

# **Discussion and Conclusions**

In our research, we were interested in a comparison of teachers' classroom management competencies in two different subjects in elementary and secondary schools, as they are perceived by their students. The results showed that the components of quality classroom management (maintenance of supportive learning climate, trusting students) are mainly present in Slovene language classes in comparison to maths classes, particularly at the elementary school level. Elementary school students gave higher grades to items concerning the learning climate and trusting students in Slovene language, compared to maths. Secondary school students assessed the clarity of rules and student obligations and paying attention in class higher in maths than in Slovene language. Although maths and Slovene curricula (Učni načrt matematika, 2011; Učni načrt slovenščina, 2011) emphasize, in addition to educational goals, personal development, the development of communication skills, critical approach and independence, an essential difference in the students' perception of teachers' work in maths and Slovene language classes has been detected. This is assumed to be connected with the teaching contents of each particular subject. Modern curricula are designed for goal-based learning, meaning that teachers should observe goals and not the contents (teaching contents are subordinated to educational goals), and they should enable students to develop appropriate competencies to operate in the knowledge society. The question is whether the education systems for maths and Slovene teachers differ in their fundamental premises, or whether teachers of different subjects understand their roles differently or class dynamics are to the greatest extent defined by the teaching contents, which in Slovene language classes presupposes communication and the inclusion of pupils with their views and opinions. Nevertheless, the same should take place in maths classes. Conception building, in-depth understanding of the teaching contents, and linking various concepts cannot be achieved or is underachieved in classrooms where the teacher is less diligent in establishing a participative culture and including pupils in direct educational work.

On the basis of a synthesis of over 800 meta-analyses relating to achievement, Hattie concluded that the most powerful effects of the school relate to features within schools, such as the climate of the classroom, peer influence, and the lack of disruptive students in the classroom (Hattie, 2009). It is increasingly important to "understand fully that every interaction between teachers and students is a learning experience for the students involved in it or who witness it" (Lewis, 1997 as cited in Roache & Lewis, 2011, p. 234). Pianta (2003, as cited in Pianta, 2006) emphasizes the socio-emotional and instructional aspects of child-teacher interactions as integrated processes that can be observed in teachers' intentionality in interactions with the child and the classroom as a whole (ibid., p. 700):

Intentional teachers have high expectations for their children, skills of management and planning, and a learning orientation in the classroom; they engage children's attention with appropriate activities, use effective

feedback in their interaction with children, and convey warmth and acceptance while doing so.

Considerable differences between the views of pupils and students have been identified. Such differences indicate that, as students get older, teachers pay less attention to the aspects of quality class management in all its dynamics and multi-prospects. We can conclude that secondary school teachers are more focused on achieving educational goals, while aspects of forming a suitable class climate remains less important. Lewis (2006) reported that teachers in secondary schools might see themselves as teachers of information and classes rather than teachers of individual student. Similarly, Lewis (1999, as cited in Lewis, 2006) found the stereotypical distinction between primary (elementary) and secondary teachers: the first focus primarily on involving, supporting and educating the whole child, while the latter emphasise more surveillance and punishments to secure the establishment of the order necessary to facilitate learning. Harter (1996, as cited in Pianta, 2006) researched how relationships with teachers change from elementary to junior high school: "relationships between teachers and students become less personal, more formal, more evaluative, and more competitive" (ibid, p. 699). In contrast, many studies showed that high-quality relationships between teachers and students, adequate class climate, respect, consideration of feelings, trust between teachers and pupils, and appropriate support for teachers contribute to better learning outcomes (Hamre & Pianta, 2001; La Paro & Pianta, 2003 in Jennings & Greenberg, 2009; Pianta, 2006).

Obviously, Slovene teachers should be aware of the above aspects of learning outcomes and be provided by social and emotional competence.

Wentzel (1998 in Pianta, 2006, p. 699) suggest that teachers who convey emotional warmth and acceptance as well as make themselves available regularly for personal communication with students foster the positive relational processes characteristic of support. Nevertheless, it is necessary to bear in mind the point made by Evertson and Poole (2008), who emphasised the importance of the content of learning and the learning process itself. They pointed out that a teacher's classroom management system communicates the teacher's beliefs about contents and the learning process. It also circumscribes the kinds of instruction that will take place in a particular classroom and the use of educational materials teachers choose to ensure the quality of teaching and learning process (Kovač & Kovač Šebart, 2004; Mažgon & Štefanc, 2012).

It is important to know that the teacher's instruction is well executed and adapted to individuals, effectively conveying feedback, considering students, encouraging learning from one's mistakes, and trusting students is conditional upon individualization. In a comprehensive study, Brophy (1996, as cited in Marzano, 2003) established that the most effective classroom managers tended to employ different types of strategies with different types of students, whereas ineffective managers did not. In situations involving behavioural problems, effective managers decide on the spot which strategy to use in view of individual characteristics of students and how to react (in different ways). Roache and Lewis (2011, p. 246) stressed that teachers need to use the techniques that reinforce positive relationships between teachers and students. "Techniques such as rewarding and recognising positive student behaviour, involving students in setting expectations for appropriate behaviour, and calmly discussing breaches of rules with students as part of an agreed upon system aimed to help them develop responsibility and respect for the rights of others" (ibid.).

The results of evaluation of teacher competencies would imply a need for change in teachers' attitudes about their role and the role of students in teaching and learning. They should change towards a socio-constructivist perspective in which the teacher is also seen as a promoter and moderator in the learning process, while pupils and students are seen as active participants in the learning process in which they construct their own knowledge. In our opinion, in-service training should start with intensive reflection on teachers' subjective theories about teaching, learning, and their role in education. Special attention is to be dedicated to raising teacher awareness of the significant connection of achieving educational goals within appropriately formed class climate that facilitates and supports learning. As Pianta (2006) suggested, the quality of student-teacher relationships can be enhanced by systematic interventions and supports and such efforts routinely are related to improvements on a number of indicators of well-managed classrooms.

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