

SELF EFFICACY OF A TEACHER AND ITS INFLUENCE ON THE CLASSROOM CLIMATE

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The paper was developed with support under VEGA 1/0098/17 project Individual concept and strategy for teaching within teachers' professional development

Abstract: Teacher has pedagogical and didactic skills that are indicators of his work. The level of self efficacy of the teacher is the teacher's belief in these abilities and has an impact on several aspects of school activity. The presented work investigates the impact of subjectively perceived ability on the classroom climate

Keywords: self efficacy, class climate, pupil, teacher

1 Introduction

The demand of the society on the personality and professional work of the teacher are more and more challenging. The teacher should be able to develop pupils' abilities, motivate pupils, create a favorable environment for pupils which will lead to pupils' self-education. It is not just what the teacher proves externally, but important is, how the teacher perceives his abilities and how he evaluates his pedagogical activity. S. Takahashi (2011) says that the teacher's belief in his abilities and possibilities to implement pedagogical practices leading to pupil learning and teaching can be described as teacher's perceived ability. The way a teacher assesses his qualities is the most important self-regulatory element in his work and greatly influences his approach to pupil development and the quality of classroom activities.

2 The Self-Efficacy Theory

The concept of self-efficacy was introduced by American psychologist A. Bandura (1997) and is based on his theory of socio-cognitive learning. The view on the theory of personally perceived ability in our conditions was dealt with by J. Mareš (2013), P. Gavora (2008), A. Wiegerová, a kol. (2012) and others.

Self efficacy is a set of attitudes of an individual to oneself and integrates three components: cognitive, emotional, and congenial. The cognitive plane includes self-knowledge, knowledge of one's qualities and self-affirmation as a need to maintain an image of oneself. The emotional plane includes self-esteem, the feelings that one has (self-pity, disappointment ...). The conceptual plane includes self-realization, self-enforcement and self-control (Kosišková, V., 2011).

The founder of this term, A. Bandura (1997), understands this concept as the conviction of man about the ability to organize and perform the activities necessary to achieve certain results. It is therefore about persuading people about their abilities to exercise control over their own being and the events that affect their lives. Teacher perceived ability is how he assesses his potential in the planning and realization of teaching, it is a belief in how it works on pupils and what teaching performance it can do. The issue of self-efficacy is not a unified concept, because high self-efficacy of a teacher in one area does not mean that it will also be perceived in different area. The development of this ability is already being developed during the undergraduate study and is further developed during the practice. Teaching self-efficacy may vary depending on subject, classroom, and environment.

Teacher self efficacy is a significant factor influencing the teaching process, its climate, approach to pupils, difficulty and student requirements. This fact is confirmed by P. Gavora (2012) and distinguishes didactic self-efficacy, self-efficacy for class leadership and self efficacy for student engagement.

Teacher self-empowerment is a significant factor which influences the teaching process, its climate, approach to pupils,

demandingness and pupil requirements. This is confirmed by Gavora (2012).

I.A. Friednam and E. Kass (2002) propose a new definition of self-efficacy, according to which the perceived professional ability of a teacher is the teacher's perception of his ability to perform:

- required professional activities and regulate relationships involved in the process of pupil education (classroom efficacy)
- organizational tasks, becoming part of the organization and its political and social processes (organizational efficacy).

This definition regards the teacher as part of the organization in which he or she works in the area of pupils and class, where he presents as a leader and tries to guide pupils to achieve cognitive and social goals.

He or she also works in the area of colleagues and management, in which he/she is a member of the group, acts in the way as to achieve and enforce the goals of the organization (In Lukáčová, V., 2016).

In this way the teacher also profoundly shapes the self-conception of pupils. As we have already mentioned, the teacher is an important factor in creating a positive climate in the classroom. He or she influences it not only with the pedagogical competences but also with the positive relationship to the pupils, teaches them to acceptance, tolerance and respecting different opinions and beliefs.

3 Research

The aim of our research was to find the level of professional competence of teachers and its impact on the classroom climate.

Methods: The research tool by which we determined personally perceived professional ability is called The Ohio State Teacher Efficacy Scale (called OSTES). The original version of authors by A. Woolfolk Hoy and M. Tschannen-Moran (2001). Our research was based on a three-factor model - the ability to use educational strategies, the ability to manage the class, the ability to motivate pupils. We used another research tool to determine the climate in the studied classes. The author of the questionnaire My Class Inventory (MCI) is J. Lašek (2012). We focused on the variables of satisfaction, disputes, learning difficulty, competitiveness and coherence in the questionnaire.

Methods of correlation analysis and variance analysis were used for statistical data processing. Research file: The research sample consisted of 93 teachers working in 15 schools in the Nitra region. In the research participated 221 pupils (48% of boys, 52% of girls) who completed the MCI questionnaire and we were able to examine the climate in 23 classes.

3.1 Research of the self efficacy of a teacher

Table 1: Averages of subscales to the OSTES questionnaire (self efficacy of teacher)

	Average	SD	Cronbach's alpha
F1: Ability to use teaching strategies	7,65	0,89	0,88
F2: Ability to manage the class	7,47	0,98	0,87
F3: Ability to motivate pupils	6,98	1,07	0,86

Table 1 lists the average values in subscales of OSTES questionnaire. According to the results, the highest average of 7,65 was achieved in the ability to use educational strategies. A slightly lower average of 7,47 was achieved in the subscale of

the ability to manage the class and the lowest average of 6,98 in the subscale was of the ability to motivate pupils.

In our research sample, teachers were the most confident in the category of teaching strategies. These are ways in which the teacher tries to make the teaching process more effective, he uses adequate teaching practices, a suitable way of explaining the subject.

The ability to manage the class shows in the plane as how the teacher keeps calm atmosphere during the lesson, how he can create appropriate groups during activities, and how he or she can plan activities. The ability to motivate pupils is shown in the level of raising pupils' interest in the curriculum and the interest in activity so that the pupils give the teacher questions about the curriculum.

It should be emphasized that perceived professional ability is the teacher's belief about his activity. It's not his real ability nor the picture of his real acting in class.

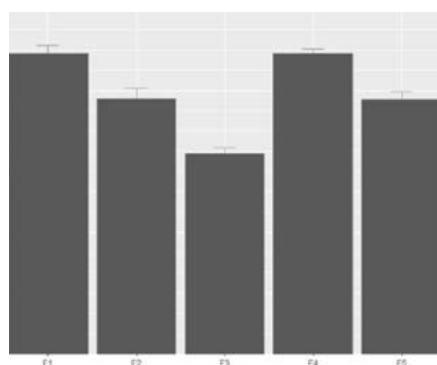
3.2 Class climate and research findings

By class climate, we mean the atmosphere in the classroom. It is connected to the quality of teaching. There is a specific climate in each class, because there are factors that affect it in each class. Whether the climate is positive or negative, it mainly affects pupils' performance, pupil-to-pupil relationships, and pupil-teacher relationships. The teacher and other factors have an irreplaceable role in shaping of the social climate in the class, such as the nature of teaching practices, the participation of pupils in teaching, the expectations of the teacher. We measured the following research data in the classroom research.

H. Grecmanová (1998) points at factors that are necessary to create a positive climate from pupils' perspective: if learners can discover themselves, requirements are placed according to pupils' abilities, accepting a pupil, the pupil can experience success, fair approach to all pupils, opportunity to give an opinion on different situations.

Table 2: Climate in classes

	Excellent	Good	Weaker	Inappropriate
Satisfaction	0 (0%)	21 (92%)	1 (4%)	1 (4%)
Coherence	0 (0%)	18 (78%)	5 (22%)	0 (0%)
Disputes	1 (4%)	16 (70%)	5 (22%)	1 (4%)
Competitiveness	0 (0%)	8 (35%)	15 (65%)	0 (0%)
Difficulty	3 (13%)	20 (87%)	0 (0%)	0 (0%)



Graph 1: Average values of the Climate in classes (questionnaire MCI), F1- Satisfaction, F2- Disputes, F3-Competitiveness, F4- Difficulty, F5- Coherence

The result of the Tukey test with the Bonferroni correction shows, that statistically significantly highest average values achieved the pupils' satisfaction and learning difficulty (medial values of these variables are not statistically significant ($p =$

0,999)), followed by disputes and pupils' coherence (medial values of these variables are not statistically significantly different ($p = 0,999$)). The lowest average values were achieved in the case of pupils' competitiveness. The equivalence of medial values for all other pairs of variables is statistically significant at the significance level of 0,001.

4 The relationship between teacher's subjectively perceived professional ability and classroom climate

The relationship between the teacher's personally perceived professional ability expressed by three subscales of the OSTES questionnaires (F1 - ability to use educational strategies, F2 - ability to manage the class, F3 - ability to motivate pupils) and by the class climate expressed by the five variables (satisfaction, coherence, disputes, difficulty, competitiveness) in the 23 classes were evaluated by correlation analysis. From the correlation coefficient values shown in Table 4 results, that at the importance level of 0,05, none of the correlation coefficients is statistically significantly different from zero. The numbers in the table represent Spearman's correlation coefficient.

Table 4: Correlation matrix of subscales OSTES and MCI variables

	Satisfaction	Disputes	Competitiveness	Difficulty	Coherence
F1: the ability to use educational strategies	-0,39	0,11	0,37	0,19	-0,36
F2 the ability to manage the class	-0,35	0,12	0,11	0,17	-0,13
F3 the ability to motivate pupils	-0,39	0,16	0,42	0,32	-0,33

D. de Vaus (2002) states that if the value of the correlation coefficient reaches a value in the range of 0,10 - 0,29, the dependence can be interpreted as low to medium and in the range from 0,30 to 0,49 as medium to substantial, which also happened in our case.

Table 4 shows that the higher professional ability of the educator correlates with the lower satisfaction of the pupils in the class. A low correlation can also be seen in the variable competitiveness and the F2 subscale - the ability to manage the class. This means that a teacher with a higher professional ability in the field of classroom management does not have a major impact on pupils' competitiveness.

On the contrary, in the F1 subscale - the ability to use educational strategies and F3 - the ability to motivate pupils, are the results more significant. This means that the higher the teacher's professional ability to use educational strategies and the ability to motivate pupils, the greater the competitiveness among pupils.

The results point to the fact that the higher teacher's level of professional proficiency, the lower the level of satisfaction of the pupils in the class. Furthermore, the higher the teacher's professional ability to motivate pupils, the greater the competitiveness between the pupils and the pupils perceive the educational activity as difficult.

A surprising conclusion is that the higher the ability of the educator to use educational strategies and to motivate pupils, the lower the coherence of pupils in the classroom.

5 Conclusions

The results of the research show that teachers with higher professional ability in our examined sample showed a worse climate in the classroom, resulting in increased pupils' competitiveness, poor coherence and high teacher demands on

pupils. There are a few reasons that may have a negative impact on the class's climate.

By the fact that the teacher has a high level of subjective professional competence, he / she is sufficiently confident in his abilities, he likes to experiment, gives the pupils more challenging and divergent tasks, thus places higher expectations on pupils. This can lead to an increase in competitiveness among pupils, because everyone desires success and wants to excel. The teacher must count on the fact that the pupils observe the successes and failures of their classmates and compare their performance with them. By increasing demands on pupils also increases the severity of educational activities, the difficulty in assessment and self-assessment of pupils. Pupils do not have to feel comfortable in the class, by competing with each other arise conflicts, and decreases classroom coherence as a group. The teacher tries to lead the pupils to the maximum extent by using cognitively more challenging tasks. The pupils can perceive the difficulty of the tasks by the teacher negatively, especially when other teachers do not have such expectations.

The unfavorable climate in the classroom may be the result of a rigorous approach and educational process of the teacher to a pupil. School should be the place where the child develops in all its aspects, from the cognitive, affective and psychomotor point of view.

School is the place where a child spends a long time. Educational activity develops all the components of pupil's personality. Based on the research evidence we believe, that teachers should pay more attention to the development of the social side of teaching, participate in creating a favorable social climate to make children feel comfortable and safe. A pleasant learning environment makes interaction in the classroom easier and helps to develop interpersonal relationships and also creates the appropriate foundation for effective achieving of educational and social goals.

It follows that although the teacher believes in his ability to manage the teaching process, the learner does not always have the same feeling. An important step is to get feedback from pupils, so the teacher can create a current picture of their abilities. In order to form a positive climate, the teacher can work as follows: not to expose pupils to stressful situations, give space for self-realization, accept pupils, arouse enjoyment by their activities, be fair. Finally, it should be remembered that each pedagogical worker must be aware of the appropriate teaching practices in order to achieve effective and motivating teaching and to realize the positive climate in the classroom. This process also leads the teacher to a real self-image of his abilities.

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Primary Paper Section: A

Secondary Paper Section: AM