



DIDACTIC CULTURE OF SCHOOL AND STUDENTS' EMOTIONAL RESPONSES (*RELATED TO THE TEACHING PROCESS*)

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Didactic culture of school, as one of the possible approaches to the analysis of school quality, relates to the values, beliefs and meanings ascribed to the experiences in the teaching process. High level of didactic culture refers to permanently introducing a development with the intention to improve teaching process in all of its components. This paper focuses on students' emotional responses related to the teaching process and attends to the fact that emotions significantly impact learning and teaching, and significantly determines didactic culture of school. Since emotional responses depend of age of students, the author focuses solely on students emotional responses in primary school (13-years-olds). The empirical part of this paper aims at determining the emotional responses of students directed according to specific subjects related to the pleasant emotional responses (liking, satisfaction, curiosity), and unpleasant emotional responses (boredom, fear). By examining the emotional responses of students in the research, the author of this paper plans activities in the school with participants of the research (teachers) who are open minded and ready for changing teaching practice. The author expects identification implicit theory and intellectual model teachers, and a better understanding of one's own teaching practice related to the students' emotional responses.

Keywords: Teacher, Student, Emotions, Emotional response.

Theoretical Reflection

School culture and culture in general are often labeled as self-evident. It is probably for this reason that they are approached from different perspectives and observed according to various criteria. For the purposes of this paper, school culture is defined as a relatively permanent quality of school environment which influences the behavior of its members thus determining the overall way of life of school (Domović, 2004). The authors dealing with issues of school culture take different criteria for classification. One of the best known divisions was by Stoll and Fink (2000), which distinguishes mobile, circling, wandering, straining and drowned school. Hargreaves' (1995) division distinguishes four types of school culture: a traditional, collaborative, controlled, anomic and optimal. The traditional one is characterized by a low level of cohesion and a high degree of control. The collaborationist one has a low degree of control and a high degree of cohesion. The controlled one has a high degree of control and cohesion, while the anomic one has a low degree of cohesion and control. An ideal type of school is an optimal school, an effective school with optimal relation between social control and cohesion. The typology of Rosenholtz (1989) differentiates static and dynamic school culture. The dynamic culture of the school is focused on its own priorities, and the static one is directed towards external demands. By studying the culture of school life, Kantorova (2009) focuses on the following five areas of school life:

overall attitude to school and motivation for learning, quality and competence of teachers, school rules and classroom discipline, class solidarity as a social group, and architectural, aesthetic and hygienic aspects of school. One of the pedagogical concretizations of school culture has been given by Staničić (2006), who divides it into: pedagogical culture, didactic culture, the culture of relations, specific school culture and organizational culture. This paper aims at paying special attention to one of the above concretizations of school culture, the didactic culture. Under didactic culture we mean values, beliefs and attitudes of the leaders of the teaching process on the subjects. The values, beliefs and attitudes which make didactic culture significantly influence the teacher's behavior and relationships in the classroom, and therefore it is studiously examined. One of the important indicators of didactic culture is the emotional climate in school and one of the conditions for a positive didactic culture is that all subjects feel good (Kolak, 2013.). Under the emotional climate we mean the quality of relationships in the educational process, which implies a domination of feelings of comfort or discomfort of students in the teaching process (Bognar, Matijević, 2005). Emotional climate can be examined from different aspects and in this paper we focus on the emotional reactions of students because they significantly influence their mental processes. Emotions are involved in almost every aspect of the teaching and learning process and therefore understanding of the nature of emotions within the school context is crucial (Macklem, 2008). One of the hottest topics of theoretical considerations in pedagogy today is precisely the affective domain of the educational process and the related phenomena. Even Pestalozzi emphasized that education should be a unity of head, heart and hands or, speaking in modern language, unity of cognitive, affective and psychomotor (Bognar, Dubovicki 2012). The process of teaching is very sensitive to students' emotional states. Emotions affect teaching and learning. Since learning requires concentration, effort and perseverance, in teaching activities that cause joy and pleasure, and not boredom students will learn more easily. If students are emotionally attracted by some content they will be able to devote to it in the long run, and to better overcome its problems. Emotional responses of students in teaching serves as a signal of what is happening in the teaching situation and which students actively participate and can directly or indirectly act on teaching and learning (Kolak, Majcen, 2011). Emotions also affect school outcomes. Unpleasant emotions usually lead to blocking, withdrawal, poor attendance, resistance, delay with the teaching duties... while pleasant ones result in inclusion, acceptance, creativity, increased interest and perseverance (Milivojevic, 2010). Author Reinhard Pekrun (according to Buric, 2008) referred to the mentioned emotions as academic emotions, and distinguishes them in relation to different criteria. The orientation criterion distinguishes emotional responses related to the activity and outcomes. By the time dimension it differentiates between the students' responses associated with hoping for success, those associated with anxiety caused by a possible failure (prospective), and success enjoyment, pride, sadness and anger after the failure (retrospective). By the criteria of activation, it differentiates between activating emotions (for example, enjoying learning), and deactivating emotions (for example, helplessness). On the issue of sustainability of emotional responses it differentiates emotions as states (current experience in a specific situation and time point) and emotions as traits (repetitive experiences that the student typically experienced during certain activities or outcome achievements). Didactic culture in this paper distinguishes those emotional reactions that are associated with learning activities and those related to educational outcomes. In the category of emotional responses of students that are associated with learning activities, boredom (as an unpleasant emotional reaction) occurs as the most significant response, and curiosity (as a pleasant emotional reaction), and in the category of emotional responses related to learning outcomes, fear (as an unpleasant emotional reaction) occurs as the most important response, and satisfaction (as a pleasant response). These four emotional responses (boredom, fear, curiosity and satisfaction) were the subject of the empirical part of this paper.

Empirical Part

In the empirical part of the paper the goal was to determine students' emotional responses during teaching process. The goal was operationalized in four research tasks by determination of students' emotional response to:

1. boredom within each school subject
2. fear within each school subject
3. curiosity within each school subject
4. satisfaction within each school subject.

Research population were 13 year old students (seventh grade) from an elementary school in Zagreb, Croatia. For the given emotional reactions the students gave their responses on the Likert's five stage scale in these categories: 'never', 'rarely', 'sometimes', 'often' and 'always'. In Croatian schools 13 year old students have these obligatory school subjects: the Croatian language, art, music, a foreign language, math, biology, chemistry, physics, PE, history, geography and technical culture (N=12). Within this population of 13 year old students, these subjects are taught by 17 teachers. Therefore, some subjects are numerically marked and relate to different teachers who teach the same subject.

The first researched emotional response was the students' boredom within each school subject. Boredom is very important for the correct diagnosis of didactic culture of school. Students feel bored in situations when teaching does not offer a possibility for achieving some of their wishes. In teaching, the most frequent boredom is situational boredom. This means that the student is aware of his/her wishes, but because of the demands of teaching, cannot satisfy them. In teaching, boredom diagnosed through students' behavior is also called agitation. It includes purposeless movements and actions such as rocking, drawing, tapping. Students in the case of boredom usually escape from school. This consists of mental (dreaming and lack of thought) or physical escape – fleeing from school. Fleeing from school or absenteeism is a special pedagogical problem whose causes significantly refer to the emotional response of boredom.

Table 1. Students' emotional responses of boredom within each school subject

BOREDOM	Never	Rarely	Sometimes	Often	Always
Croatian language 1	24,39	21,95	31,71	14,63	7,32
Croatian language 2	17,02	51,06	25,53	2,13	4,26
Art	59,09	26,14	7,95	1,14	5,68
Music	29,55	26,14	28,41	5,68	10,23
Foreign language 1	6,98	13,95	13,95	34,88	30,23
Foreign language 2	9,52	28,57	47,62	0	14,29
Foreign language 3	4,17	20,83	50,00	16,67	8,33
Math 1	30,23	44,19	6,98	9,30	9,30
Math 2	13,33	35,56	26,67	15,56	8,89
Biology	21,59	42,05	19,32	9,09	7,95
Chemistry	21,95	21,59	22,73	21,59	12,50
Physics	42,05	26,14	18,18	4,55	9,09
P.E.	47,73	34,59	54,17	3,41	9,09
History	30,68	25,00	20,45	17,05	6,82
Geography 1	13,04	52,17	8,70	21,74	4,35
Geography 2	7,69	27,69	23,08	18,46	23,08
Technical culture	6,82	12,50	21,59	23,86	35,23

In the results analysis we started from the subjects in which boredom as emotional response occurs most intensely in the category 'always'. These are: technical culture, foreign language 1, geography 2, and chemistry. From these results it is evident that boredom in teaching does not derive from the content

of the subject, because all survey respondents are learning the same content in the foreign language and geography. This opens a new research question: Which factors other than content influence the appearance of boredom? Before answering this question it is necessary to answer the question: How do teachers teach as to cause boredom? The way of teaching proved to be essential for this emotional response, rather than the content of the subject. The challenge for didactic culture of school represents finding a way to organize teaching so that most students do not get bored. Student oriented approach may help, as well as choosing the teaching methods which put the students in an active position. In the analysis we highlight those subjects in which boredom occurs least frequently. These are: art, PE and physics. We can assume that researcher visit to these classes may provide an example of good practice.

The second research task was focused on fear as an emotional response. Fear is an emotional response that occurs in students when they estimate that some of their values are compromised. In teaching, the most common fear appears in the form of classroom anxiety. This is the kind of fear related to a future event which in their opinion will exceed their abilities. (Milivojević, 2010). For didactic culture of school it is important to diagnose the type of classroom anxiety. If the classroom anxiety is stimulating, it mobilizes students, and if it is inhibitory, it reflects negatively on the didactic culture of the school since it leads students to avoid obligations and to give up.

Table 2. Students' emotional responses of fear within each school subject

FEAR	Never	Rarely	Sometimes	Often	Always
Croatian language 1	43,90	41,46	12,20	0	2,44
Croatian language 2	34,04	34,04	21,28	10,64	0
Art	93,18	3,41	3,41	0	0
Music	82,95	9,09	3,41	2,27	2,27
Foreign language 1	44,19	23,26	16,28	11,63	4,65
Foreign language 2	52,38	23,81	9,59	14,29	0
Foreign language 3	50,00	25,00	16,67	8,33	0
Math 1	32,56	30,23	25,58	4,65	6,98
Math 2	28,89	24,44	22,22	13,33	11,11
Biology	46,59	28,41	13,64	9,09	2,27
Chemistry	59,09	26,14	11,36	2,27	1,14
Physics	18,18	26,14	27,27	10,23	18,18
P.E.	82,95	13,64	3,41	0	0
History	60,23	18,18	7,95	10,23	3,41
Geography 1	52,17	21,74	13,04	13,04	0
Geography 2	29,23	23,08	26,15	7,69	13,05
Technical culture	42,05	38,64	12,50	2,27	4,55

Fear is an emotional response that is extremely important for diagnostics in didactic culture. Culture of fear in the school system does not contribute to a positive school climate or achievement. Regardless of the positive function of unpleasant emotional response, significant presence of this emotional response requires pedagogical action and intervention. In the category 'always', fear does not occur frequently in any particular subject. Special attention should be given to teaching of mathematics, physics and geography. Fear of the subjects of mathematics and physics points to a possibility of deep-rooted significance of mathematical and logical intelligence, the need to review the professional egoism and assessment of personal equation of teachers. The results show that there are subjects in which there is

even complete absence of fear. These are art and PE. Didactic culture of the researched school is extremely good in terms of fear.

The following students' response significant for the diagnosis of didactic culture and focused on the third research task was curiosity.

Table 3. Students' emotional responses of curiosity within each school subject

CURIOSITY	Never	Rarely	Sometimes	Often	Always
Croatian language 1	17,07	34,15	21,95	19,51	7,32
Croatian language 2	4,26	25,53	34,04	23,40	12,77
Art	18,18	18,18	17,05	17,05	29,55
Music	21,59	30,68	23,86	10,23	13,64
Foreign language1	34,88	18,66	23,26	11,63	11,63
Foreign language2	9,52	14,29	28,57	28,57	19,05
Foreign language3	4,17	25,00	54,17	0	16,67
Math 1	11,63	11,63	27,91	25,58	23,26
Math 2	17,78	20	33,33	15,56	13,33
Biology	6,82	15,91	23,86	22,41	25
Chemistry	9,09	21,59	20,45	31,82	17,05
Physics	13,64	13,64	25	26,14	21,59
P.E.	19,32	12,50	18,18	6,82	43,18
History	12,50	12,50	17,05	30,68	27,27
Geography 1	8,70	17,39	26,09	34,78	13,04
Geography 2	26,15	18,46	27,69	18,46	9,23
Technical culture	35,23	21,59	23,86	11,36	7,95

Curiosity in the category 'always' occurs most intensely in PE, art, history and biology. In the category 'never' it occurs in technical culture, foreign language and geography. These results brought into connection boredom and curiosity. The lack of curiosity in teaching indicates boredom. Students feel curious when assessing that the educational objective is truly important. It is a sense of aspiration that the students can have, do, achieve or accomplish something. Students' curiosity can be a powerful tool in creating a dynamic learning process. Awakening students' curiosity and thirst for knowledge is a great challenge for creating a positive didactic culture of school.

The last research task was focused on the students' satisfaction in a particular school subject. Their satisfaction is an indicator of teaching quality.

Table 4. Students' emotional responses of satisfaction within each school subject

SATISFACTION	Never	Rarely	Sometimes	Often	Always
Croatian language 1	7,32	26,83	21,95	12,20	31,71
Croatian language 2	2,13	8,51	36,17	42,55	10,64
Art	6,82	13,64	6,82	18,18	54,55
Music	10,23	15,91	19,32	20,45	34,09
Foreign language 1	25,58	25,58	25,58	11,63	11,63

Foreign language 2	9,52	9,52	47,62	19,05	14,29
Foreign language 3	4,17	8,33	37,50	41,67	8,33
Math 1	11,63	16,28	20,93	37,21	13,95
Math 2	28,89	22,22	26,67	15,56	6,67
Biology	9,09	11,36	31,82	30,68	17,05
Chemistry	6,82	21,59	23,86	30,68	17,05
Physics	12,50	18,18	19,32	23,86	26,14
P.E.	9,09	5,68	18,18	29,55	37,50
History	7,95	13,64	18,18	30,68	29,55
Geography 1	0	17,39	34,78	26,09	21,74
Geography 2	24,62	27,69	18,46	18,46	10,77
Technical culture	26,14	19,32	21,59	20,45	12,50

The students in this study are least satisfied with teaching of mathematics, technical education, foreign languages and geography. The greatest satisfaction was in PE, music, art, history, physics and the Croatian language. For the four subjects in which satisfaction was lowest emotional responses such as boredom and the lack of curiosity were noticed.

The research on how students feel in class proved to be a good trigger for changing teaching practices. Teachers wanted to know how students feel about their teaching. Thus, this research received a new direction. The following steps in the research were interviews with teachers and participating observation of teaching. The number of survey participants in the research stage two has decreased because in this part of the survey voluntary consent of research participants was essential. Among the 17 teachers who were the research sample in the first part of the study, 7 decided for the next step.

The interview focused on the analysis of personal didactic culture and was associated with the emotional responses of students known through the previous research. The results of the interviews with teachers suggest 3 problems. The first problem is the one that occurs as a discrepancy between the official and personal theory. Teaching activities directed at the students, active learning methods and didactic scenario which induces students' curiosity are not a personal choice of the survey participants. The participants are familiar with the methods that affect the didactic culture of school and they know how to apply them but personally do not fully agree with them. The participants show a visible focus on the teaching content rather than on the student. They called good practice 'performances for the students', rather than the teaching process. Another problem is the problem of shallow understanding of didactic culture of the school. These participants could be characterize as the ones who think they know, while they actually do not know. In this category there is significant orientation of teachers on handbooks and a blind following the content without critical review. These participants also show a great respect for those who value the school externally, and focus on the need to satisfy the external monitors and meet their personal criteria. A more meticulous approach of these participants is essential as well as a development of self-confidence and critical thinking.

The third problem was expressed by only one participant, and it is focusing on non-recognition of theory that governs his practice. This participant requires, above all, awareness in the field of didactic culture of the school. This category would consist of teachers who are not aware of their ignorance, and are ready to provide high resistance.

Out of 7 research participants in the next research step, 6 decided on the observation of teaching. The results of observation lead to the conclusion that the teaching practice is most controlled by the teachers' personal theory. With those teachers who, along with resistance to change, a desire for change was visible, it was possible to start action activities. The teachers most commonly decided on recording teaching lessons, which was followed by a joint analysis.

In the analysis of the lessons we focused only on those segments of teaching that affect the researched emotional responses. In the observation of teaching, it was excessive dominance of the teachers' speech which appeared as the primary problem, and which had the greatest influence on the appearance of boredom. In such teachers the traditional approach in the category of speech was seen. The teacher explains, advises, asks, corrects. The students' speech was reduced to answering questions. This approach is rooted in the belief that adults know everything while children do not know anything, so adults need to teach them. This domination of teacher speech does not leave opportunities for students. It seems that teaching is a transfer of knowledge. The teacher does not direct teaching in order for a student to acquire and upgrade knowledge. The analysis of one teaching lesson showed that the teacher asked a total of 41 questions in one lesson, and the students did not ask a single question. The teacher received a total of 61 students' answers. Too many teacher's questions and neglecting student's questions leads to the suffocation of students' curiosity.

The second problem is the minimum activity of students. The three main activities of students are sitting, listening and writing. In the observed teaching, only 52% of students were active.

The third problem is the sources of knowledge. The textbook was the dominant source of knowledge, and there was too much focus on it. The lack of a challenging environment is the fourth problem, and it was visible upon entering the classroom. The teacher's personality was stated as the fifth problem. Didactic culture of school is significantly influenced by teachers, not only by what they know, but also by who they are. The most prevalent profile among the 6 observed participants was the teacher whose communication with the students focuses on correcting mistakes and on guidance by asking questions. The ideal student is neat, punctual, diligent, careful, conscientious and unmistakable. There is evident impatience and pettiness in the teachers' expectations, excessive requirements are set up and students are expected to be perfect. Therefore, they are often controlled and given unnecessary tips. Conversation with students, because of the focus on content, often turns into a lecture.

The observed segments of teaching in didactic culture of school raise many new research questions, and the author of this paper gives special attention to the profile of teachers. This will be the main area of the author's interest in determining didactic culture of school.

Concluding Observations

Emotional responses of students during teaching process proved to be extremely important. Beside the fact that they confirm the findings of some previous research, they prove to be an excellent trigger for changing teaching practice. Since in this study voluntary participation was the eliminating factor, it is significant to note that all the participants were interested in feedback on how students feel during their teaching. It is significant that the feedback had different effects on different teachers. A smaller number of them focused on following the research steps through interviews and observation of teaching. Such response of the survey participants (35%) is not surprising, because in didactic culture of school observation of teaching proved to be quite inaccessible. Teachers are reluctant to letting anyone observe their teaching process, and the characteristics of the school system in this regard would be extreme closeness. Therefore, the result of 35% of teachers can be considered as surprisingly good. There are numerous factors that can influence this closeness (for example, years of experience or the antagonism between theoreticians and practitioners). Studious dealing with these factors exceeds the problems of this paper and therefore they are not taken into account in this sample. There is no doubt that the observation of teaching process caused changes in the educational practice. These changes can be developed in schools through action activities or by forming teams for peer observation.

The students' emotional responses have demonstrated efficiency, not directly for changing the practice, but as an indicator for teaching quality and for didactic culture of school, and as a motivator for further actions. This study specifically demonstrates the importance of the emotional response of boredom. In observation of teaching, actions are mainly directed at this emotional reaction because it has far-reaching consequences for didactic culture and represents the main didactic challenge.

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