

# CLASS CLIMATE IN SECONDARY SCHOOLS OF LAW AND SECURITY SPECIALIZATION

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**Abstract:** This article defines the basic theoretical backgrounds concerning the class climate and presents some selected results of a questionnaire research of class climate in secondary schools of law and security specialization.

*Keywords:* class climate; secondary schools of law and security specialization; questionnaire School Class Climate

## 1. INTRODUCTION

The problem of class climate has been discussed a lot in recent years especially on the theoretical level (e.g. Mareš, 1998; Lašek, 2001; Průcha, 2002; Ježek 2006 and others). Today there are attempts to adapt questionnaires from abroad and create new Czech tools (e.g. Mareš & Ježek, 2012). Also, there is a trend of putting the problem in the teachers' practice and offering them suitable tools for finding out and improving the class climate (see e.g. the activities of *Národní ústav odborného vzdělávání /National Institute of Vocational Training/ - NÚOV* and its project called *A Way towards Good Quality*).

## 2. PROBLEM SETTING

Behaviour, learning and perceiving events not only reflect the individual characteristics of the pupils but also the social background in which they are living. Its standards would influence the person in a significant way. A background may also be the class. Fraser (1998) emphasizes that it is important to connect the theoretical knowledge about the class climate and its measuring with practical use of diagnostical methods in order to improve the quality of a lesson. The information gained by this diagnosis could serve to help the teacher's self-evaluation and improve both the class climate and the learning results.

Class climate can generally be understood as correlation between the teachers and pupils, and among pupils in a group (Picket & Fraser, 2010, p. 322). Also numerous Czech authors deal with the class climate (e.g. Průcha, 1997; Mareš, 2001; Grecmanová, 2003 and others). According to Mareš (1998, p. 4) the term of social climate means "long-term phenomena, typical of a class and teacher for several months or years. Their actors are pupils of the whole class, groups in the class, single pupils, all the teachers teaching in the class and eventually the teachers as individuals. The social climate in the class is also mediated by broader social phenomena, such as social climate of the school and social climate of the teaching staff." (Mareš 1998, p. 4)

Mareš (1998, p. 5) states that climate cannot be understood as a singular thing apart from the environmental, social-psychological and cultural context. By Lašek (2001) the pupil is a co-producer of the climate and gets the experience of it.

The outcome of the investigation should be primarily improving the class climate. An effective (good-quality) teacher should be able to create positive learning climate and an atmosphere of respect among pupils and between pupils and the teacher. Therefore, the climate should be safe and clear at both sides (for teachers and pupils), while the pupils can feel "fair" treatment from their teacher (comp. Kyriakides, 2006, p. 375).

### **3. SUMMARY OF THE PRESENT STATE OF THE PROBLEM**

The class climate has been receiving a lot of attention abroad for a long time. This trend has also been followed in the Czech Republic since 1989. Kurt Lewin's theory (1936) built the basis for the first research in this area. The living space would enclose the part of a person's environment where there are only those facts which are important for the personality, by Lewin. The living space, by Lewin, would be determined by the personality and the person's needs, goals or desires which are shaped by perceiving the environment and knowledge of the environment (in Ježek, 2006).

Another theoretical framework for the research and for creating tools is Rudolf Moos's theory (1991, in Ježek, 2003). He is a co-author of the CES questionnaire (Classroom Environment Scale). The system of the environment and the personality are two separate areas correlating with each other. The environment would influence persons and they would come to terms with it. Based on these influences they may or may not change their behaviour. These would come from the family, school or work background.

This problem marked great development some 40 years ago when class climate was investigated by Walberg (1979), Moos (1974, 1979), Fraser (1986) and others, who found it necessary to research subjective perceptions of the very actors of class climate. Along with this, there is also the need of standardizing the suitable evaluation tools. Questionnaires came up to find out the subjective perception of climate by its actors, i.e. pupils and teachers. This required a development of tools measuring the class climate, the impact of students' and pupils' perceptions on measuring the cognitive, behavioral and affective outcomes. Further, they surveyed the extent of the teachers' and other influences on the class climate and how much the climate could be improved, changed etc. Generally, using these results and their revision, some variables were found such as cohesiveness, task orientation, rule clarity, student satisfaction and teacher support which were positively correlated with the increase of academic achievement (Waxman & Chang, 2006, p. 196).

There is a permanent interest in finding out how teachers and their pupils perceive the class climate. The most common method remains the questionnaire. Some older questionnaires or "newer ones" are being revised. The examples may be investigations by Fischer, Dorman and Waldrup (2006), who were using some scales from SPAQ questionnaire (*Perceptions of Assessment Questionnaire Student*) and WIHIC questionnaire (*What Is Happening In This Class*) or the research (Brok, Bergen, & Brekelmans, 2006) in which 1604 students and 72 teachers from Holland were investigated using the QIB questionnaire (*Questionnaire of Instructional Behavior*).

These methods would often get added with some of the other methods like in the Indian research (Koul & Fisher, 2006) where the WIHIC and QTI questionnaires were added with observation and interview.

In different parts of the world there are intense efforts to adapt foreign tools to find out the class climate. Perhaps the most "popular" in this respect is the WIHIC questionnaire (Rawnsley & Fisher, 1998) which inspired a new Czech questionnaire called A Class Climate (Mareš & Ježek, 2012). As mentioned, some authors surveyed the prevention and intervention of social pathological phenomena in the class. Leff et al. (2011)

At present, both quantitative and qualitative methods and techniques are used in research. Also a mixed design has been applied in recent years. Questionnaires remain the tools which are used in form of pre- and post-tests, before and after the intervention in the class (Pickett & Fraser, 2010). There are efforts not only to standardize the questionnaires but also other methods (Leff et al., 2011).

### **3.1 Investigating class climate in the Czech environment**

A rapid development in the research of class climate in the Czech environment came up after 1989.

In 1990s Lašek and Mareš (1991) carried out investigations in 24 primary school classes. When comparing traditional and alternative schools they noted fewer frictions in alternative schools.

Due to the lack of a sufficient amount of Czech investigations on the secondary level let me mention a Slovak research by Miezgová (1994) who surveyed the social climate in a grammar school class. She brought some information about a difference in boys and girls in their perceiving the climate. She also investigated the differences in climate between common and church grammar schools.

Later, Linková (2000, 2001) compared the climate in alternative and common schools. No significant differences were found between the two types of schools. The same author compared the alternative and common schools later again (2005). An interesting finding was the difference in climate depending on the teacher's age, and also the fact that if the class was taught by only one teacher, the pupils were happier. The alternative schools showed both lower competitiveness and less difficulty of study.

In 2001 the Czech Ministry of Education carried out a vast research (Havlíková & Kolář, 2001) comparing class climate in common (control) schools and in Healthy Schools. Investigated were 33 common schools and 33 schools with the program of Healthy School. It surveyed the quality of some social climate indicators in the class. The research aimed at how the pupils

felt about the lessons and what those pupils perceived who had experienced bullying. In the field of relationships there were no significant differences, but some were found in the field of safe environment in favour of the Healthy Schools. Still, paradoxically, the pupils of Healthy Schools indicated more frequent bullying.

Kašpárková (2005) compared the secondary class climate using KLIT questionnaire (Lašek & Zemanová, 2002). It aimed at "describing the phenomenon of social psychological climate of secondary class in detail". The file contained 27 classes in 6 secondary schools in Olomouc region. The author presented findings about different perceptions of supportive climate or motivation to negative school performance between girls and boys. For example, girls rather agreed that they belonged to the class while boys rather disagreed.

One of the many areas dealt with by the *"Prague group of school ethnography"* was a longitudinal research of social relationships in the class. The research was first carried out in 1992 and repeated ten years later in order to find out how the class climate had changed in the meantime. It was stated that no improvement in the field of climate was noticed. More frictions were noted with less cohesiveness and satisfaction of the pupils.

At present there is a trend of bringing the problem nearer to the school practice. It aims at providing the teachers an appropriate tool which would suit the Czech conditions and help teachers to find out about the climate in their class and work with the information collected by the tool. Within the project *A Way towards Good Quality* there is a new questionnaire called *Class Climate* by the authors Mareš and Ježek (2012) which was designed for pupils and their teachers to improve their social climate.

#### **4. METHODOLOGY OF THE RESEARCH STUDY**

The research study, which is part of the author's PhD thesis, is aimed at finding out the climate characteristics in classes of secondary vocational schools of law and safety specialization. Its specific feature was a big overhang of boys over girls, especially in some of the classes.<sup>1</sup> The rate was 305:178. The average age of the pupils was 17.8 years.

The questionnaire School Class Climate by authors Mareš and Ježek was chosen as appropriate for the climate research in secondary vocational schools (with law and safety specialization). It meets several requirements the author had for the tool. It is applicable in the Czech environment and was made in collaboration with Czech teachers. It gives characteristics of the social climate in the class and simultaneously it surveys the relationship of pupils to a teacher. It is applicable in all types of secondary schools and the handbook of the tool is commonly available.

The data were collected during May and June 2012 with the help of teachers and collaboration of pupils in 5 secondary vocational schools of law and security specialization. Handed out were 502 questionnaires in paper form and 483 questionnaires were eligible for further processing. Excel program was used for the basic analysis. The research sample was selected by intention, based on the availability and willingness of the school to collaborate. Some 50 % of all pupils in the 2<sup>nd</sup> and 3<sup>rd</sup> year of study are represented in it. This fact has to be considered when reading the results. The participants were from 24 classes in the regions of South Moravia, Moravia-Silesia, Zlín, Hradec Králové and Plzeň. In the questionnaire the respondents ticked the extent of their agreement on the 1-5 scale, while 1 = disagree, 2 = rather disagree, 3 = hard to decide, 4 = rather disagree, 5 = disagree. The total number of single scales was 11, of which the last 4 scales were given as optional by the authors of the questionnaire. The pupils filled in those scales too because they were considered important by the author. If the items concerned a teacher, it was the class teacher.

Except for a few questions, most of them were conceived positively. A high score in most scales means good social class climate. The case where the whole set of items (questions) is stated negatively, is the scale reflecting the activities during breaks. There, the high values indicate potential problems in the pupils' group. Problem-raising might be the last scale which surveyed the extent of effort to get some respect from the surroundings, i.e. the extent of pupils' conformity. The authors of the questionnaire think the high score could be a hinderance in interactive teaching. Still, in percentil figures the higher score has a higher value (in percentil). Therefore, when selecting classes for further investigation this scale will not be taken into account.

#### **5. SELECTED RESULTS FROM THE QUESTIONNAIRE SURVEY**

This chapter presents selected results of the questionnaire survey which aimed at describing the class climate in secondary vocational schools of law and security specialization and decide about which classes would be eligible for the second part of the survey. In order to preserve

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<sup>1</sup> Two of the classes weakened the rate as they specialized in law office work and the rate was opposite there.

the anonymity of the participating schools, they have randomly received one of the five letters of the alphabeth, i.e. schools A to E (see table 1.3–1.5). The classes were marked with numbers 1–24. The results have been compared with the norms created for secondary schools and secondary apprentice colleges (table 1.2). The norms indicate values from a standardized sample, achieved by the middle half of the class (Mareš & Ježek, 2012).

Table 1 - Norm values of class medians

Scale	Name of scale	Norm range
S1	Good relationships to classmates	3,8–4,4
S2	Relationships to classmates	3,2–3,8
S3	Perceived support by teacher	3,7–4,2
S4	Fair approach of teacher to pupils	80 % > 4
S5	Transfer of learned schoolwork between school and family	3,4–4,4
S6	Preference of competitions by pupils	3,1–3,5
S7	Activities during breaks	1,5–2,25
S8	Possibility to discuss in lessons	3,4–4,0
S9	Iniciative of pupils	3,25–4,0
S10	Pupils' effort to study	3,9–4,4
S11	Effort to get respect from surroundings	3,1

Modified from Mareš and Ježek (2012)

The evaluation of the questionnaire started by counting the averages of single scales for each pupil. The final number concerning the whole class is a median of the averages.

Table 2 indicates that generally most results are not contradicting the norm. The underlined medians present figures below average. If there is the exclamation mark, the figure is deep below average and indicates a possible problem in the class climate. These figures have appeared occasionally in almost all scales. In five cases it was in a scale finding out if the teacher's attitude was equal to all the pupils (S4). Surprisingly, this scale had high norm values (in classes where the authors of the questionnaire worked, 80 % of teachers achieved a score higher than 4). Three very low figures appeared in the scale finding out the transfer of learned schoolwork (S5), i.e. interconnection of schoolwork with life at home. The same number of problem figures appeared in the scale finding out the possibility of discussion in lessons (S8). On the contrary 12 classes achieved above average figures (more than 3.5) in the scale finding out preferences of competitions (S6). Also interesting was comparing answers of boys and girls. The average value of the answers to all the questions except for the items of *activities during breaks* (the negative answers would bias the results) is absolutely identical, i.e. 3.5 in both groups.

Table 2 - Medians of single classes

		S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11
A	1	3,80	<u>2,90!</u>	<u>3,40</u>	<u>3,60!</u>	3,60	<u>2,90</u>	<u>2,63</u>	<u>3,00</u>	3,25	<u>3,64</u>	3,00
A	2	<u>3,40!</u>	<u>3,00</u>	<u>2,80</u>	<u>3,80</u>	3,00	3,60	2,50	<u>3,00</u>	<u>3,00</u>	<u>3,29!</u>	3,00
A	3	4,40	3,70	5,00	5,00	3,30	<u>2,80</u>	<u>1,38</u>	4,38	3,75	3,93	2,88
A	4	4,00	3,40	<u>3,40</u>	<u>3,60!</u>	3,40	3,60	1,75	3,50	3,25	3,86	3,25
B	5	3,80	3,00	<u>3,60</u>	<u>3,80!</u>	<u>3,20</u>	3,60	1,50	3,50	3,25	<u>3,71</u>	2,50
B	6	4,40	3,60	4,00	4,80	4,00	3,70	1,25	3,63	3,50	3,86	2,25

B	7	4,20	3,60	4,20	4,40	3,80	3,40	1,25	4,00	3,75	4,14	2,75
B	8	4,20	3,90	4,40	4,90	3,80	3,00	2,00	4,13	3,75	4,50	2,00
C	9	4,20	3,40	4,20	4,80	3,60	3,60	1,75	3,75	3,50	<u>3,57</u>	2,75
C	10	3,80	3,70	4,30	4,90	<u>2,90!</u>	3,40	1,50	4,13	<u>3,13</u>	4,07	2,00
C	11	<u>3,60</u>	3,00	<u>2,50!</u>	<u>3,50!</u>	<u>3,10</u>	<u>3,00</u>	1,63	<u>2,75!</u>	<u>3,13</u>	<u>3,71</u>	2,75
C	12	4,20	3,60	4,40	5,00	3,40	3,80	1,75	3,75	3,25	4,00	2,25
C	13	<u>3,40!</u>	3,20	<u>3,20</u>	<u>3,00!</u>	<u>3,00</u>	3,60	2,50	<u>3,00</u>	3,50	3,71	3,00
C	14	4,00	3,30	<u>3,50</u>	<u>3,50!</u>	<u>3,00</u>	3,30	1,88	<u>2,75!</u>	3,38	3,71	2,38
D	15	4,00	3,00	<u>3,60</u>	4,40	<u>2,60!</u>	3,60	1,25	<u>3,25</u>	<u>2,75!</u>	<u>3,57</u>	2,25
D	16	4,00	3,40	4,00	4,40	<u>3,00</u>	3,60	1,50	3,75	3,25	<u>3,71</u>	2,50
D	17	3,80	3,40	<u>3,40</u>	4,20	3,40	4,00	1,75	3,50	3,75	4,14	2,50
D	18	<u>3,40!</u>	3,20	3,80	4,00	<u>2,80!</u>	3,20	1,75	3,75	<u>3,00</u>	<u>3,57</u>	2,50
D	19	4,00	4,00	4,00	4,40	3,80	3,40	1,75	3,50	3,75	4,00	3,00
D	20	3,80	<u>2,90</u>	4,50	5,00	3,60	3,70	2,00	4,13	3,25	3,93	2,75
E	21	<u>3,60</u>	3,20	<u>3,60</u>	4,40	<u>3,20</u>	4,00	1,75	3,50	3,25	4,00	3,00
E	22	4,00	<u>3,00</u>	<u>3,60</u>	4,20	<u>3,00</u>	<u>3,00</u>	1,75	<u>2,25!</u>	<u>3,00</u>	4,00	3,00
E	23	4,20	3,70	4,70	4,80	3,60	3,30	1,88	4,00	3,88	4,07	2,50
E	24	3,80	3,40	4,80	5,00	3,20	3,20	1,75	4,50	3,25	4,00	2,50

The single medians can be transferred to percentiles making it easier to compare with norms and with each other (table 3). The classes presented very different results. The percentiles are very different in single classes and also within one class. We can say that the characteristics of class climate in secondary vocational schools of law and security specialization are a big diversity in single scales. A greater consistency in answers is in *preferences of competitions by pupils* where 14 classes reached the percentile of 60. High figures in this scale refer to a liking for competitions. Mareš and Ježek (2012) mark the scale as a rather individual variable. As regards our type of schools it may not be like this. In view of the fact that the author knows the learning atmosphere in these schools, she would call it a very "for-competitive" atmosphere (almost all the schools have a higher grant of P.E. lessons and various sport courses which support competitiveness). This "competitive atmosphere" is created by the whole group and the pupils support and confirm it.

Table 3 - Percentil score of classes

		S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11
A	1	20	10	20	10	40	20	90	20	25	10	70
A	2	5	20	10	20	10	80	90	20	10	5	70
A	3	80	60	100	95	20	5	20	95	60	30	50
A	4	30	30	20	10	20	80	40	40	25	20	90
B	5	25	20	25	20	20	80	20	40	25	10	20
B	6	80	60	50	60	60	90	10	50	40	20	10
B	7	60	60	70	25	50	70	10	75	60	50	40
B	8	60	90	80	70	50	20	60	80	60	90	5
C	9	60	40	70	60	40	80	40	60	40	10	40

C	10	25	70	80	70	10	70	20	80	10	50	5
C	11	10	20	5	10	10	20	30	5	10	10	40
C	12	60	60	80	95	20	90	40	60	25	40	10
C	13	5	25	10	5	10	80	90	20	40	10	70
C	14	40	30	20	10	10	50	50	5	30	10	20
D	15	40	20	25	25	5	80	10	20	5	10	10
D	16	40	40	50	25	10	80	20	60	25	10	20
D	17	25	40	20	20	20	100	40	40	60	50	20
D	18	5	25	30	20	5	40	40	60	10	10	20
D	19	40	90	50	25	50	70	40	40	60	40	70
D	20	25	10	90	95	40	90	60	80	25	30	40
E	21	10	25	25	25	20	100	40	40	25	40	70
E	22	30	20	25	20	10	20	40	5	10	40	70
E	23	60	70	95	60	40	50	50	75	70	50	20
E	24	25	40	95	95	20	40	40	95	25	40	20

Interesting (but not detailed) was the comparison of class climate in the five participating schools (table 4). In scales 1-4 the figures were ranging from percentil 30 to 60. They are scales finding out *good relationships to classmates*, *collaboration with classmates*, *perceived support by teacher* and *fair attitude of teacher to pupils*. The scale *transfer of learned schoolwork between school and family* is a scale with the lowest values. On the other hand the scale of *preference of competitions by pupils* received the highest score, with percentil from 40 to 80. The scale *activities during breaks* shows a range from 20 to 60. The scale *possibility to discuss in lessons* is moving around the centre, i.e. from percentil 38 to 61. In the scale *iniciative of pupils* there is another decrease in all schools and the score ranges from percentil 26 to 46. The scale *pupils' effort to study* is very variable and ranges from percentil 16 to 43. The last problematic (see previous part) scale *effort to get respect from surroundings* shows the highest variability score with the percentil of 19 to 70.

Table 4 - Percentil score of schools

	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11
A	34	30	38	34	23	46	60	44	30	16	70
B	56	58	56	44	45	65	25	61	46	43	19
C	33	41	44	42	17	65	45	38	26	22	31
D	29	38	44	35	22	77	35	50	31	25	30
E	31	39	60	50	23	53	43	54	33	43	45

## 6. CONCLUSION

In this article we have set the basic theoretical backgrounds concerning the class climate and presented some selected results of a questionnaire research of class climate in secondary schools of law and security specialization. We compared classes of this type of schools with the norms in the standardized sample of Mareš and Ježek (2012). This comparison showed that the investigated classes did not considerably differ from the norm. A characteristic sign were the relatively high values in preferences of competitions by the pupils. On the other

hand, the lowest values were reached by the pupils in the field of transfer of schoolwork between school and family, and also in the initiative of pupils. Interestingly, both boys and girls perceived the social class climate in the same way. In order to process the research results it is advisable to carry out another qualitative research.

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