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Educational Environment of the Modern School in the Aspects of Learning Factors, School Climate and Education Paradigms

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Abstract. The article deals with the research data on the current realia of educational environment in school perceived by pupils, their parents and teachers as well as their expectations related to educational environment of the *Good* school. On the ground of questionnaire survey data, pedagogical and psychological factors of learning and school climate as perceived by the respondents are analysed; characteristics of educational environment are revealed in the aspects of the impact, interaction and learning paradigms.

Keywords: educational environment, learning environment, teaching (impact) paradigm, school climate, modern school.

Introduction

The problem and relevance of the research. In many countries, the strivings to improve the education systems are linked to scientific research on school as a major element of the education system; the studies seek to find ways to improve the processes of teaching and learning, the educational content, the social and psychological environment in school, teachers' competences etc. International (OECD, 2013; Konings et al., 2005;

Kaarina & González, 2011) research works usually consider educational environment as a fundamental of the pedagogical process; it determines the interconnection of educators, learners, educational content and resources as well as the process of education. Importance of the contextuality of educational environments is emphasised. In some cases educational environment of the current school is dealt with when focusing on innovative application of technological solutions (Konings et al., 2005) or physical environment (Kaarina & González, 2011) in education. However, all mentioned studies indicate that both educational and physical environments should change along with the changes in the paradigm, school and learning cultures.

Modernity of school is linked to a changing attitude towards the teacher's and learner's roles, emphasising activeness and independence of pupils' learning, teaching and learning facilitated by modern technologies as well as orientation to humanistic values, democratic principles, tolerance to diversity, respect to individuality etc. (inclusive school, child-friendly school, *Good* school) and construction of the reality of teaching and learning meeting these values (school culture – rules, behaviour norms, traditions etc.).

Girdzijauskienė et al. (2011) carried out a research, which in detail dealt with the school environment favourable for developing creativity. The research has shown that school culture, i.e. enshrining of tolerating environment, encouragement of involvement into activities, acknowledgement of the value of creativity, openness of communication, support of risk-taking and attempts, is highly important for creation of the school environment favourable for development of creativity and creative thinking, i.e. maintenance of tolerant environment, encouragement of involvement into the activities, recognition of the value of creativity, openness of communication, support to risk-taking and attempts. For development of creativity and creative thinking, psychological climate in school, atmosphere in classroom, interrelations of school community members based on self-esteem and respect, teacher's personality, functional spaces for teaching and learning are highly important as well. The Conception of the Good School (2015) emphasises that "proper implementation of the school's mission is a major feature of activities of a successful school, good (desired, acceptable) teaching and learning outcomes and enriching, memorable, meaningful, pleasant experiences of living in school"; it is stated that educational environment is one of many factors conditioning implementation of school's mission; and also it is explained that the factors mentioned "are just preconditions for implementation of the mission".

In the current period of the changes in education characterised as a period of reforms or even a crisis, improvement of schools becomes an important challenge not only to policy-makers but also to school communities. The Conception of the *Good School* (2015) has become an official document defining the concept of the quality of educational environment in school. However, it remains unclear how different participants of education, i.e. pupils, their parents, teachers, value modern school environment and what *good* school they would wish to attend, what are the differences in their attitudes. It is relevant to

identify quality criteria of school educational environment, which would meet all groups of interests, quality criteria, to obtain data-based evidence on guidelines for improvement of school as educational environment. Even though aims, functions, responsibilities are regulated by external factors (educational policy, regulations of the education system), nevertheless, every school is rendered unique features through sociocultural diversity of school community members (pupils of different age, different abilities, their parents, teachers, school managers, other staff), internal organisation of school activities, elements of school culture (norms, values, behaviour standards, traditions). When constructing educational environment of the modern school, agreement of pupils, their parents, teachers and other interested groups concerning quality criteria of educational environment is important. Knowing opinions of school community members on modern school it would be clearer what direction should be followed to improve quality of educational environment of the school. Therefore, this research¹ aims at revealing reality of current educational school environment perceived by pupils, their parents and teachers as well as expectations of educational environment of the *good* school.

In Lithuania there are almost no detailed research studies on quality of educational environment. It is relevant to empirically investigate implementation of theoretical constructs forming the conception of the *good* school in educational reality by applying methods of scientific research. The research problem is defined by the following questions: What are the characteristics of educational environment in modern school? What should educational environment of the Good School be?

The research object is *educational environment of the modern school* in the aspects of factors, school climate and educational paradigms.

The research aim is to reveal characteristics of educational environment of the modern school as perceived by school community in the aspects of learning factors, school climate and educational paradigms grounding on results of theoretical analysis and empirical research.

The objectives:

- 1. On the ground of analysis of scientific sources, to explore the concept of educational environment, essential components and factors of educational environment.
- 2. Grounding on empirical research data, to reveal pupils', their parents' and teachers' opinions on the characteristics of the educational environment of the current school and the *good* school, investigating pedagogical factors (conditions of organisation of education, diversity of learning activities and informational resources) and school climate (psychological, social) factors in the context of educational (learning, interaction and impact) paradigms.

This article presents only part of the research exploring not only educational environment but also other aspects of quality of the current and the *good* school: education and self-education, learning outcomes etc.

The Concept of Educational Environment

When dealing with school as educational environment, scientific literature suggests notions *learning environment*, *educational environment* and the like. "Learning and teaching environment encompasses both physical (buildings, rooms, technologies etc.) and social (relationships or learners, mood, motivation etc.) aspects" (Bartaševičius, 2012, p. 1). It is acknowledged that physical environment and IT in schools are significant in striving to improve pupils' learning, increase their learning motivation applying contemporary methods of teaching and learning, stimulating interactive, independent learning. However, equipment of physical environment and modern technologies in schools can stimulate improvement of teaching and learning if there is quality teaching, pedagogue's ICT competence, effective management of school and environment encouraging both pupils and teachers to use technologies (Brazdeikis, 2009).

The notion "learning environment" is explained in two ways. In some cases physical environment, interior and technological solutions ("Physical space of teaching and learning is more often treated as one of the key factors in aiming to ensure successful performance of an educational institution by providing conditions for pupils' learning", as stated by Bartaševičius, 2012, p. 1) are emphasised. In other cases psychological, emotional aspects of learning environment are underlined. Characterising organisational environment, Kučinskas (2001) points out its factors including several most significant to investigate school environment: social-psychological (school climate, normative ethics) and partly aesthetical (premises, workplaces, means) factors. According to Bitinas (2013, p. 355), "learning environment is the whole of material, social, psychological and pedagogical factors influencing the teaching process and results". Thus, it can be stated that learning environment is an environment which is diverse physical locations, contexts and cultures in which pupils learn2. Balevičienė, Urbanovič (2012) characterise environment suitable for learning by such indices as safe environment, order and discipline, positive encouragement, good microclimate, respect to both teacher and pupil, aesthetical and rich environment. Thus, in the conception of environment which is suitable for learning, as the authors have it, psychological, emotional condition of participants of education, microclimate factors (safe, positive environment based on respect to both teacher and pupil) prevail; also, aspects of physical environment (a esthetical environment) and resources (rich environment) are singled out.

In diversity of concepts defining school as educational environment, a very important place is allocated to analysis of educational conceptions, activities of both teacher and learners according to a prevailing relation between education and self-education:

traditional, characteristic of teaching based on pedagogue's impact on a learner,
 "the school is dedicated not that much to learning but rather to teaching", "much

² Learning environment (29 August 2013). In S. Abbott (Ed.), The Glossary of Education Reform.

attention is paid to abstract theoretical knowledge"; "a teacher is an authority, a leader, a source of knowledge, a model of behaviour", educational content and process are equal, standard to all, little focused on individuality (Vaicekauskienė, 2012, p. 2);

- based on the interaction between teacher and learner in the educational process;
- or modern, based on the learning paradigm and emphasising creation of environments enabling learning, activeness of a learner, independent construction of own knowledge and abilities (Jucevičienė, Simonaitienė, Bankauskienė, & Šiaučiukėnienė, 2005), personalised education and learning acknowledging that people's experiences, needs and goals differ, they learn at different pace and in different ways(Williams, 2013; Longworth, 2005).

Creation of proper learning environment is one of preconditions for implementation of the learning paradigm (Barr & Tag, 1995, cited from Bitinas, 2013, p. 339).

Petruškevičiūtė (2015, p. 44) puts it that current pedagogical interaction, like all reality of education,<...>"moves" to other educational environments, is influenced by various agents and sociocultural spaces making educational impact; the shift from pedagogical interaction to educational interaction proceeds. All these make importance of educational environment suitable for learning, "creation and operation of educational and conditioned learning environments enabling learning" relevant (Jucevičienė et al., 2005, p. 7). "Educational environment is a dynamic information space for learning activities", as stated by P. Jucevičienė (2008); she also emphasises that direct impact on learning is made by a number of factors of educational environment: the aim, content, forms, methods, means etc. of education, also capability of a learner to learn, motivation, "learning style and strategy suitable for acting in a given educational environment" (Jucevičienė, 2008, p. 70).

Educational environment is understood much broader than just teaching and learning in physical spaces of school, even though modernised, equipped with modern technologies. Bartaševičius (2012, p. 2) emphasises that when analysing features of teaching and learning environment scientists (Dumont, Istance, & Benavides, 2010; Lipinskienė, 2002) underline not only pedagogical (educational content, applied methods of teaching and learning and the like), physical (spaces used for education), learning resources (ICT and other means), but also social (teacher's role and behaviour, class mood, culture of pupils' relationships, learning motivation, communication and collaboration of all participants of education, respect to individuality) aspects. As the author has it, modern environment of teaching and learning should ensure a possibility to learn independently, in group, to provide proper conditions for pupil's self-expression and dissemination of innate powers (Bartaševičius, 2012, p. 1).

Thus, the differences in conceptions of educational environment and learning environment found in scientific literature emphasising that educational environment is created by an educator (Lipinskienė, 2001; Jucevičienė, 2008; Čiužas, 2008), and learning

environment can be also called the personal dimension at the individual's level created by a learner himself/herself (Jucevičienė, 2008). However, in the conception of learning environment Neifachas (2014, p. 23) merges the components of physical space where learning proceeds, learning resources enabling an individual to learn, and systems of relations between a pedagogue and learners, social participation of learners.

On the ground of analysis of scientific literature, it can be stated that essential components of educational environment encompass the context where education and self-education take place: school climate, value aspects, psychological, learning motivation factors; physical learning environment, learning resources etc. Summing up the data of analysis of scientific literature, modern educational environment should be treated as the whole of educational, psychological, social and physical learning factors meeting the learning paradigm.

Research Methodology and Methods

The methodology of quantitative research employing the method of standardised questionnaire-based written survey has been chosen for the research. Referring to the data of analysis of scientific literature sources, essential components of educational environment have been singled out and a ranking scale comprising statements (variables) characterising various dimensions of educational environment has been formed. Variables of the scale *Educational Environment* includes elements of *school culture* characterising components of educational environment in aspects of the factors of 1) physical spaces, 2) diversity of learning resources, 3) psychological (learning motivation) and 4) school climate(school value background, normative ethics, psychological and physical safety of community members). The statements reflect both traditional school (impact and teaching) and modern discourses (orientation to pupils' needs, differences etc.). In the sub-scales the *current school* and the *good school*, every index was assessed in a five-rank scale from "completely agree" (5) to "completely disagree" (1).

Results of the questionnaire-based survey have been processed applying methods of descriptive statistics. Exploratory factor analysis of main components has been applied (separately for each group of the respondents); the article presents the data of factorial analysis c^2 ; df; p, KMO, factor dissemination percentage, indicators of factorial weight (L) and test reliability (Cronbach α) data.

Non-parametric analysis of factors has been carried out to compare differences in opinions inside groups of respondents concerning educational environment in the current and the good schools. The article presents and interprets only statistically significant (p < 0.005) data of non-parametric tests on differences inside groups of respondents concerning importance of characteristics of educational environment in the current and the good schools; the groups are: pupils, depending on their gender and school type

(Mann-Whitney test was applied); parents, depending on their education; teachers, depending on their qualification category (Kruskal-Wallis test).

T-test investigated differences of means of respondents' opinions about educational environment in the current and the *good* schools in the aspects of impact, interaction and learning paradigms. The article presents means (M) of the impact, interaction and learning scales, statistical significance (*p*), T test and devalue.

Research sample. The research involved 4 randomly selected gymnasiums (out of 8 operating in Siauliai city, Lithuania), 8 pro-gymnasiums (out of 13), 3 primary schools (out of 4). The questionnaires have been disseminated to all teachers working in selected schools and randomly selected pro-gymnasium and gymnasium pupils and their parents (or foster parents). The research involved 814 pupils, almost equally boys (378) and girls (410) attending basic (404) and secondary (396) education classes; 1025 parents (or foster parents) of pupils and 528 teachers.

A major part of surveyed pupils' parents were individuals whose children attended pro-gymnasiums and basic schools (571), gymnasiums and secondary schools (358), the least part of the respondents were parents (96) of pupils who attended primary education cycle. More than half (57.1 %) of surveyed parents were 36–45 years old; they were mostly women (82.7 %). Higher education was held by majority (66.3 %) of the respondents.

More than half (55.1 %) of surveyed teachers work in pro-gymnasiums, one-third (36 %) in gymnasiums, around one-fifth work in primary schools/classes. Majority of the respondents have teacher's methodologist's (44.9 %) and senior teacher's (41.5 %) qualification category, expert's category is held by 3%). Majority of surveyed teachers are over 46 years (51.9 %), one-third (33.7 %) at the age of 36–45, the biggest part of the surveyed were women (87.5 %).

Common percentage of return of questionnaires was 86.4 per cent (pupils 84.7 %, parents 94.5 %, teachers 76.1 %). It can be stated that general sample of the respondents is representative and sufficient to carry out statistical analysis of the data; however, the part of pupils, parents and teachers representing various schools is not even; therefore, a systemic error is likely in generalising the sample results.

Research Results

Educational environment in the current and the good school

Results of the survey of pupils, their parents and teachers show the educational and psychological factors of learning as well as social (school climate) factors as perceived by the respondents; also the results allow assessing characteristics of educational environment in school in the aspects of educational paradigms.

Factor analysis of pupil survey revealed their opinion on the most important characteristics of the current and the *good* school (see Table 1).

Table 1 Current and good school in pupils' view

CURRENT SCHOOL KMO = 0.927; df = 136, p = 0.000; α = 0.873	L	GOOD SCHOOL KMO = 0.911; df = 136; p = 0.000; α = 0.833	L
Environment that motivates, is oriented to		Environment that motivates and enables lear-	
pupils' needs, safe (22.0 %)		ning (28.1 %)	
Aims to make pupils be interested in learning	0.718	Aims to make pupils be interested in learning	0.713
When creating interior spaces and environment, pupils' opinions and needs are regarded	0.715	School environment is adjusted to diverse learning	0.709
Learning takes place not only in classro- oms but also outside classrooms and even outside school territory	0.670	abundance of teaching aids and visual materials	0.667
School environment is adjusted to diverse learning	0.556	When creating interior spaces and environment, pupils' opinions and needs are regarded	0.656
Flexible system of order and behaviour		Clear, stable requirements for discipline, order	
(19.4 %)		and standard behaviour (11.5 %)	
Not only pupils' rights but also duties are emphasised	0.701	Much attention is paid to maintenance of discipline and order	0.694
abundance of teaching aids and visual materials	0.656	Problems of discipline, behaviour, order in school are solved by employing assistance from outside	0.645
Much attention is paid to maintenance of discipline and order	0.634	Rules of work and order in school are stable	0.609

Analysis of the notional content of major components of the educational environment shows that in their current school pupils mostly notice 1) features of *environment that motivates for learning, oriented to pupils' needs, safe environment* and 2) *flexible system of requirements for order and behaviour.* Environment that motivates for learning (*Aims to make pupils be interested in learning*) is created with regard to pupils' opinions and needs as well as providing conditions for active education in various spaces (*Learning takes place not only in classrooms but also outside classrooms and even outside school territory; school environment is adjusted to diverse learning – in groups, individually, independently) and taking part in various activities (<i>At school a child "simply lives"...*), pupil's individuality is acknowledged, all feel safe. Perhaps, safety of school community is being created through flexible application of requirements for order and behaviour. To pupils' mind, attention to pupils' education (*not only pupils' rights but also duties are emphasised; much attention is*

paid to discipline and order; ...environmental aesthetics) is a characteristic feature of the current school. Therefore, learners perceive the striving of the current school to create psychological and pedagogical conditions, coherence of educational aims and educational environment factors which are favourable to pupils' learning.

Pupils would like the educational environment of the *good* school to be *motivating* and enabling learning, characteristic of diversity of educational activities (...adjusted to diverse learning) and resources (...abundance of teaching aids and visual materials). This should be a school which is oriented to pupils' needs, tolerant to individual differences, diversity of pupils (every pupil's originality, exceptionality is acknowledged), and also emphasising clear, stable requirements for discipline, order and standard behaviour.

Pupils' parents who took part in the survey perceive the current and the *good* school slightly in a different way (see Table 2).

Table 2
Parents' opinions on educational environment in the current and the good school

CURRENT SCHOOL KMO = 0.930; $df = 153$; $p = 0.000$;	L	GOOD SCHOOL KMO = 0.848 ; $df = 171$; $p = 0.000$;	L
$\alpha = 0.880$		$\alpha = 0.687$	
Environment that motivates, enables learning		Environment that enables, is pupil-oriented,	
and is safe (28.4 %)		safe (22.9 %)	
Sufficient amount of modern learning aids on all subjects	0.734	Premises are adjusted to diverse learning	0.692
Premises are adjusted to diverse learning	0.687	\dots abundance of teaching aids and visual materials	0.664
Modern learning aids are used	0.646	Every pupil's originality, exceptionality is acknowledged	0.633
Clear requirements for discipline, behi	Requirements for standard behaviour,	stable	
and order, flexible system of rules (13.9	system of rules (11.2 %)		
Problems of discipline, behaviour, order in			
school are solved by employing assistance	0.732	Pupils are taught not to stand out	0.762
from outside			
Not only pupils' rights but also duties are emphasised	0.618	School rules are stable	0.744

The parents share an opinion that the most important features of the current school are these: 1) *learning environment that enables, motivates, is safe* and 2) *clear requirements for discipline, behaviour* and *order, flexible system of rules.* Thus, parents mostly notice that the current school enables pupils to learn thanks to provision with learning aids (*Sufficient amount of modern learning aids on all subjects*; ... *abundance of teaching aids and visual materials*; *modern learning aids are used*), provides possibilities and motivates for learning in various ways. Parents suppose, that the enabling environment in the current school is *safe* because it acknowledges pupil's individuality, pupils' needs

are regarded, *clear requirements for discipline*, *order and behaviour* are applied; the requirements are strict yet also *flexible* as in certain situations can be altered (*rules ...are corrected if needed*); reacting to problems strategies to solve the problems are flexibly selected (... *Problems of discipline*, *behaviour*, *order in school are solved by their own endeavours or ... by employing assistance from outside*).

To parents' mind, the most important features of the *good* school are *enabling learning* (characteristic of diversity of educational spaces and modern information resources), *pupil-oriented* (tolerant to diversity of pupils), motivating for learning and *safe*. However, also in the *good* school parents emphasise importance of school attention to rules of pupils' behaviour, discipline, order, a esthetics of environment. Differently from evaluation of the current school, they attributed to the environment of the *good* school the statements which in their essence are characteristic to the traditional school emphasising standards of unified behaviour (*pupils are taught not to stand out, to be "like all"*), inflexible rules of behaviour (*The rules of work and order at school are stable*) and academic purpose of a school (*School in intended for learning only*).

It should be noted that in the *good* school parents wish individualities of pupils were acknowledged and also required *not to stand out, be "like all"*. Perhaps this was the way how they expressed the striving for harmony of individuality and socialisation, a wish school educated a free, creative, thinking personality who is able to flexibly adjust to society. As B. Bitinas (2013, p. 115) has it, "education aims at a two-fold contradicting goal: to educate a pupil who is capable to adapt in society, interact with other members of society(*to be like all*) and develop one's individuality (*to be different from the rest*)".

Results of factor analysis of the data from the pedagogue survey are presented in Table 3.

Analysis of the statements submitted by the teachers reveals their opinion about the current school which is 1) **enabling learning** (Sufficient amount of modern learning aids on all subjects; ...abundance of teaching aids and visual materials; ... adjusted to diverse learning); **tidy** (...much attention is paid to tidiness and aesthetics), **safe** (To ensure pupils' safety ... the school is locked ..., monitored via video cameras) and 2) **motivating for learning** (aims to make pupils be interested in learning), **pupil-oriented environment** (when creating interior spaces and environment, pupils' opinions and needs are regarded); tolerant to individual differences (Every pupil's originality, exceptionality is acknowledged).

Teachers share an opinion that the *good* school is the *environment motivating and enabling learning*, suitable to all learning styles, encouraging learning, provided with modern learning aids etc.

Also it emphasises *stable requirements for standard behaviour* (rules of work and order at school are unchanging; pupils are taught not to stand out, to be "like all").

Table 3
Characteristics of the current and the good school in teachers' view

L	
Environment that motivates, enables learning	
0.654	
0.600	
0.577	
Stable requirements for standard behaviour	
0.810	
0.754	

Educational environment from the point of view of educational paradigms

The data of variables constituting the factors of educational environment in both current and *good* schools, as expressed by every group of respondents, has been analysed according to respondents' agreement with the statements characterising paradigms of impact, interaction and learning (see Table 1), means (T-test data is presented in Fig. 1).

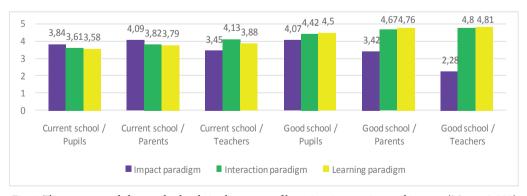


Fig. 1. The current and the good schools in the aspect of learning, interaction and impact (M; p = 0.000)

Obviously, in both current and *good* schools all participants of education notice the features of learning, interaction and impact, just the means (M) of agreement differ. The data of surveyed pupils (M = 3.84; t = 151.023; df = 809) and parents (M = 4.09; t = 163.094; df = 1023) shows dominance of the impact paradigm in the current school.

According to teachers' opinions, current schools are characteristic of interaction (M = 4.13; t = 160.929; df = 527) and learning (M = 3.88; t = 115.841; df = 527) paradigms; whereas the *good* school is characteristic of learning (M = 4.81; t = 337.918; df = 520) and interaction (M = 4.807; t = 302.036; df = 521) paradigms.

Teachers more often than pupils and their parents agreed with statements defining the current and the *good* schools in terms of implementing paradigms of learning and interaction; and expressed the least agreement with statements characterising the paradigm of impact in the current (M = 3.45; t = 79.238; df = 527) and especially the Good (M = 2.28; t = 42.678; df = 521) schools. As expected, when characterising the *good* school, all respondents expressed higher agreement with statements characterising pedagogy of learning and interaction. However, even in the case of the *good* school all groups of respondents, mostly pupils and their parents, agreed with the statements characterising the paradigm of impact which is attributed to the traditional school.

Results of non-parametric analysis pointed out differences in respondents' (pupils, their parents, teachers) opinions concerning the aspect of demographic variables. Statistically significant differences are observed in differences between boys' and girls' opinions about educational environment in the current and the *good* schools. The feature of the current school, *environment which is motivating to learn, oriented to pupils' needs*, is underlined by boys (mean range MR = 417.5) stronger than by girls (MR = 370.5; Mann-Whitney U = 67679.5; p = 0.004). After dealing with the variables constituting this factor of the current school, a statistically significant higher agreement with the statements was expressed by the boys: *aims to make pupils be interested in learning* (p = 0.016); *premises are adjusted to diverse learning* (p = 0.002); *every pupil's originality, exceptionality is acknowledged* (p = 0.036).

A feature of the *good* school, *environment which is motivating and enabling learning*, is slightly more important to girls (MR = 398.8; U = 63664.0; p = 0.000) than to boys (MR = 381.4; U = 63664.0; p = 0.000). To girls' mind, environment of the *good* school is more important rather than factors of motivation, learning diversity, acknowledgement of pupil's individuality, orientation to pupil's needs: *aims to make pupils be interested in learning* (p = 0.000); *learning takes place not only in classroom but also outside classrooms and even outside school territory* (p = 0.000); *every pupil's originality, exceptionality is acknowledged* (p = 0.000); *when creating interior spaces and environment, pupils' opinions and needs are regarded* (p = 0.001).

Moreover, girls imagine the learning environment of the good school as tidy [much attention is paid to tidiness and aesthetics (p = 0.001)], safe [all feel safe at school (p = 0.021)] and rich with various learning resources [the Internet is used in learning

(p = 0.003); abundance of teaching aids and visual materials in classes and rooms (p = 0.024)].

International research w orks (Inchley et al., 2016, p. 52) suggest that 11–15-year-old girls, comparing to their contemporaries boys, better evaluated their schools (at school 11-year-old girls feel best); in all surveyed age groups differences between feelings of boys and girls were less than 10 per cent and decreased with pupils' increasing age. According to J. Jevsejevienė (2015), some data suggests that boys' and girls' attitudes towards school and learning influence learning outcomes. Even though it is acknowledged that girls achieve higher results in learning and feel better at school, the surveyed schools boys' attitudes towards the current school are more positive and their expectations towards the *good* school are slightly more moderate than these of girls who evaluate the current school in a more demanding manner and express higher expectations towards the *good* school. Thus, our research data meets the statement that boys and girls feel differently at school (Inchley et al., 2016; Jevsejevienė, 2015). Therefore, an opinion stating that "diversity of [educational] environments can be useful not because it would better meet needs of boys and girls but because it would better meet *different* needs of children and their opportunities *despite their gender*" (Jevsejevienė, 2015, p. 6) can be supported.

Opinions of pro-gymnasium and gymnasium pupils are statistically different. Gymnasium pupils (MR $_{\rm Gymn.}$ = 436.7) more emphasised the following features of the current school than pro-gymnasium pupils (MR $_{\rm Pro-gymn.}$ = 376.3): *environment which is motivating for learning, oriented towards pupils' needs* (U = 69941.0; p = 0.000) and *flexible system of requirements for order and behaviour* (MR $_{\rm Gymn.}$ = 449.4; MR $_{\rm Pro-gymn.}$ = 362.9; U = 64484.5; p = 0.000) as well as the feature of the *good* school *motivating and enabling learning* (characteristic of diversity of educational activities and resources) *environment* MR $_{\rm Gymn.}$ = 438.7; MR $_{\rm Pro-gymn.}$ = 370.0; U = 67533.0; p = 0.000).

Analysis of non-parametric (Kruskal-Wallis) test data of the survey of parents revealed that there were statistically significant differences in characteristics of the features of environment in the *current* and the *good* schools depending on such demographic variables as parents' age, education; school *currently* attended by their children. Statistically significant differences were estimated in analysis of the data of the survey of various age parents concerning educational environment in the *good* school: parents over $56 \, (MR_{56\,y.} = 704.43)$ more than other age groups $(MR_{Up\,to\,25\,y.} = 562.50; MR_{26\,35\,y.} = 481.23; MR_{36-45\,y.} = 495.91; MR_{46-55\,y.} = 503.50)$ characterising educational environment of the *good* school agreed with the statements of the factor *requirements for standard behaviour, stable system of rules* ($\chi^2(4) = 11.71, p = 0.02$).

Statements of the factor *enabling learning, motivating, safe learning environment* characterising the *current* school were mostly supported by parents having primary education MR = 599.62 ($\chi^2(4) = 16.0$; p = 0.003); and *clear requirements for behaviour and order, flexible system of rules* are more important to parents holding basic education MR = 616.56 ($\chi^2(4) = 32.4$, p = 0.000). Parents holding higher non-universityeducation

MR = 540.73 more emphasise that the *good* school must be *enabling learning*, *pupil-oriented*, *safe* ($\chi^2(4) = 10.8$, p = 0.029), and *requirements for standard behaviour*, *stable system of rules* are mostly desired by parents holding basic education (MR = 700.45 ($\chi^2(4) = 59.9$, p = 0.000).

Some statistically significant differences in opinions on educational environment between the *current* and the *good* schools show surveyed parents' opinions depending on a school *currently* attended by their children. *Parents* of pupils attending the primary education cycle more (MR_{Pr.e.} = 586.06) than basic (MR_{B.e.} = 479.00) and secondary education cycle (MR_{S.e.} = 546.11) agreed with the statements characterising the *current* school as*enabling learning, motivating, safe*($\chi^2(2) = 17.9$; p = 0.000). A feature of the *good* school, *requirements for standard behaviour, stable system of rules*, is most relevant to parents of pupils attending pro-gymnasiums (MR_{B.e.} = 530.52), less relevant to parents of pupils attending primary (MR_{Pr.e.} = 387.45) and secondary (MR_{S.e.} = 505.93) education ($\chi^2(2) = 19.5$, p = 0.000).

Analysis of the data of non-parametric (Kruskal-Wallis) tests of the pedagogue survey highlights differences when comparing factors according to teachers' qualification categories and schools where the teachers were working. Pedagogues holding a category of a teacher more (MR_{Teach.} = 272.5) than pedagogues awarded higher qualification categories (MR_{Senior teach.} = 264.6; MR_{Teach.-methodologist} = 257.2; MR_{Teach.-expert} = 257.2) supported statements characterising the *current* school as *enabling learning*, *tidy*, *safe* (χ^2 (3) = 8.34, p = 0.040). The same respondents, pedagogues holding a category of a teacher, more (MR_{Teach.} = 295.7) agree that the *good* schoolis characterised by *stable requirements for standard behaviour* (χ^2 (3) = 12.15; p = 0.007).

Statistically significant differences in analysed teachers' opinions were found depending on a school where they were working. Gymnasium teachers ($MR_{Gymn.} = 284.4$) more often than teachers of other schools ($MR_{Pr.e.} = 233.9$; $MR_{Pro-gymn.} = 254.4$) agreed that the current school was *enabling learning, tidy, safe* ($\chi^2(2) = 6.35$, p = 0.042), and primary schools teachers ($MR_{Pr.e.} = 319.81$) more often than teachers of other schools ($MR_{Pro-gymn.} = 252.29$; $MR_{Gymn.} = 267.33$) emphasised that the *current* school was *motivating learning, pupil-oriented* ($\chi^2(2) = 8.05$, p = 0.018). However, characterising the *Good* School teachers of pro-gymnasiums ($MR_{Pro-gymn.} = 266.85$) and gymnasiums ($MR_{Gymn.} = 266.28$) more than teachers of pro-gymnasiums forms ($MR_{Pr.e.} = 195.81$) underlined *stable requirements for standard behaviour* ($\chi^2(2) = 9.404$, p = 0.009).

Generalisation and Discussion

Analysis of research data revealed educational environment of the current and the *good* schools in the aspects of manifestation of pedagogical factors (diversity of learning activities, spaces, information resources), context – social, psychological climate in school

(tolerance to diversity of pupils and their learning needs, strategies for creation of normative ethics, safe environment) and educational paradigms (impact, learning, interaction).

Pedagogical factors of educational environment in the current and the *good* **schools.** According to pupils' and teachers' opinions, the current school is *motivating for learning, oriented to pupils' needs.* According to teachers' and parents' opinion, the current school is *enabling learning*. In the current school, parents mostly notice diversity of information resources, their modernity (enabling learning); also they emphasise that the current school is a *safe learning environment*. Educational environment of the *good* school, to pupils', parents' and teachers' opinions, should be *motivating and enabling learning*. Moreover, parents would like that the *good* school were *pupil-oriented and safe*.

Educational environment in the aspect of school climate. To pupils' and parents' opinions, the current school creates safety of school community members by a *flexible system of rules, clear requirements for discipline, behaviour and order*. Pupils', parents' and teachers' opinions coincide in characterising the *good* school as having *clear, stable requirements for discipline, order and standard behaviour.*

All the respondents notice attention to psychological and physical safety of the current school community members; to achieve this sometimes measures not always complying with democratic principles are employed (e.g. part of the teachers state that *to ensure safety of pupils* the current school is ...locked ..., monitored via video cameras). However, I. Leliūgienė, A. Kaušylienė (2012, p. 31) have it that due to such measures "pupils perhaps will find higher safety, but will also undergo much more negative feelings caused by monitoring <...>". According to the authors, communication of school community members, especially participation of parents, may be more efficient aiming at safety inside school community. Perhaps this is the reason why majority of the respondents agree in the case of the current school and want in the case of the good school to have more pedagogical interaction (attention of school to pupils' opinion and needs, requirements for behaviour and flexibility in solving problem situations) and even more strict strategies of impact.

An assumption can be drawn that research data indirectly reveals unsolved problems of pupils' behaviour and discipline in the current school; it may be that these problems cause safety issues to school community members. The case that both in characterising the current school pupils and their parents and when characterising the *good* school all the respondents emphasised attention to normative ethics leads to an assumption that problems of behaviour, discipline are highly relevant.

Manifestation of educational paradigms in educational environment of the current and the *good* schools. The research data shows that the current school matches the paradigms of learning, interaction and impact. In the current school, the paradigm of impact is the most expressed. In the *good* school more expressed tendencies of learning and interaction are desired, however, the paradigm of impact remains significant, even though it is supported less. It should be noted that in this research pedagogy of interaction in both current and *good* schools manifested not that much through the culture

of learning being created, but rather through the aspects of social and psychological climate in school. The paradigm of impact mostly manifested through dealing with the factors of school climate.

The research data reveals the discourse which is characteristic to both traditional school (impact and teaching) and modern school (interaction and learning): participation of pupils increation of learning environments, attention to pupils' opinions and needs, tolerance to pupil's individuality. Even though it is underlined that pedagogy of impact is already outdated, our research data proves the tendency of continuity between the traditional and the modern schools manifesting through the wish to "retain the traditional school as a safe, well-organised, understandable micro-world" (Vaicekauskienė, 2012), as expressed by part of pupils, their parents and teachers; in this world the goal is to achieve the balance between stability and progress, individual and societal interests are coordinated³.

To sum up the research data, it can be stated that modern schools should create socially and emotionally safe environment which motivates and enables learning and interaction based on communication and collaboration of individuals holding different abilities and experiences as well as characteristic of diversity of modern learning (information) resources and educational activities.

Conclusions

Analysis of scientific sources reveals the differences between the concepts of learning and educational environment. It is emphasised that educational environment is being created by an educator, and the learning environment can be treated as both a component of educational environment and a dimension of an individual level created by a learner. It can be assumed that the dominating educational paradigm (learning, interaction or impact) becomes the key component of modern educational environment. Even though in characterisation of educational environment still significance of physical environment is underlined, nevertheless, in a modern approach, learning can take place in various environments (not only in classroom, school but also outside school); and, facilitated by developing modern information technologies, learning is transferred to virtual environments, too. Generalising data of analysis of scientific literature, the research follows the approach in which the modern educational environment should be treated as the whole of the factors of pedagogical conditions meeting learning and interaction paradigms (various spaces, learning resources enabling an individual to learn applying various methods), individual learning characteristics (different learning needs, styles, motivation) as well as

³ The concept of classical education. Ministry of Education and Science of the Republic of Lithuania, 17-06-2015, order No. V-638. *TAR*, 18-06-2015, No. 9723.

social and psychological *climate in school* (school values, strategies of normative ethics, problem-solution).

The research data shows that educational environment in the current and the modern school is revealed by the respondents as coherence of two factors: 1) pedagogical factors (diversity of learning activities and information), 2) factors of the context of teaching and learning (social and psychological climate in school). Analysis of the content of these factors of educational environment highlighted essential characteristics of the current and the *good* school in the aspect of the educational paradigm.

In the aspect of pedagogical factors (diversity of learning activities and information resources), as pupils, their parents and teachers expressed, the current school is characteristic of environment which is motivating and enabling learning. Moreover, to pupils' mind, the current school creating environment motivating learning is characteristic of orientation to pupils, acknowledges and tolerates individual differences and needs of pupils. According to opinions of all the respondents, the *good* school should be motivating and enabling learning. It should be noted that in both current and *good* schools parents emphasise importance of not only modern but also safe education environment for their children.

Analysis of factors of the context of teaching and learning (social and psychological climate in school) shows that both pupils and their parents evaluate the current school as characteristic of a flexible system of rules, clear requirements for discipline, behaviour and order. According to opinions of pupils, their parents and teachers, the *good* school would ensure safe educational environment, if stable requirements for discipline, order and standard behaviour were implemented.

Comparative analysis of the survey of pupils, their parents and teachers emphasises similarities and differences of their opinions regarding educational environment of both current and *good* schools. Analysis of the research data shows that the *current* school includes many features which would be desired in the *good* school, too. However, in both current and *good* schools, attention of the school to discipline and order is important.

The research data shows that the current school matches the paradigms of learning, interaction and impact. In the current school, the paradigm of impact is highlighted the most. In the *good* school, more underlined tendencies of learning and interaction are desired; however, the paradigm of impact remains significant.

The paradigm of impact was mostly highlighted in the dimension of climate. It has been found out that in the current school the school climate is being created through collaboration of school community, flexible treatment of pupils' opinions (paradigm of impact). Differently from characteristics of the current school as flexibly solving problems of discipline and order, in the case of educational environment of the *good* school pupils, parents and teachers emphasised the paradigm of impact and quite strict measures of discipline and behaviour problem-solving...

In the aspect of pedagogical factors, educational paradigms and school climate, educational environment characterises culture of school as an organisation. Summing up

the research data it can be stated that in the current school the culture of learning and interaction is being created and supported; however, the most highlighted is the culture of impact. This shows endeavours of the current school to create a modern environment that motivates for and enables learning, also is a pupil-oriented, safe educational environment. However, support to quite strict normative ethics expressed by many respondents even in the *good* school, perhaps, shows the need of school community to create a safer school, to pay more attention to the culture of communication and behaviour.

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Šiuolaikinės mokyklos edukacinė aplinka mokymosi veiksnių, mokyklos klimato ir ugdymo paradigmų aspektais

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Santrauka

Mokyklos šiuolaikiškumas siejamas su besikeičiančiu požiūriu į mokytojo ir besimokančiojo vaidmenis, akcentuojant mokinių mokymosi aktyvumą ir savarankiškumą, šiuolaikinėmis technologijomis grindžiamą mokymą ir orientaciją į demokratinius principus, humanistines vertybes (toleranciją įvairovei, pagarbą asmens individualumui) ir šias vertybes atitinkančios mokyklos kultūros konstravimą.

Straipsnyje pateikiami tyrimo duomenys apie mokinių, jų tėvų ir mokytojų suvokiamas dabartinės mokyklos edukacinės aplinkos realijas ir "geros mokyklos" edukacinės aplinkos lūkesčius. Šiame tyrime edukacinė aplinka nagrinėjama kaip visuma pedagoginių ir psichologinių mokymosi bei mokyklos klimato veiksnių. Nagrinėjant tyrimo duomenis atskleidžiami edukacinės aplinkos bruožai įvairių ugdymo paradigmų požiūriu, t. y. nagrinėjant edukacinės aplinkos veiksnius kaip poveikį mokiniui; kaip sąveiką ir bendradarbiavimą su mokiniu; ar kaip aplinką, įgalinančią mokinio aktyvų mokymąsi.

Mokinių, jų tėvų ir mokytojų apklausos rezultatų lyginamoji analizė išryškino jų nuomonių apie dabartinės ir geros mokyklos edukacinę aplinką panašumus ir skirtumus. Tyrimo duomenų analizė rodo, kad dabartinė mokykla turi nemažai tokių bruožų, kurių jie pageidautų ir geroje mokykloje. Respondentai teigė, kad dabarties mokyklai būdinga mokytis motyvuojanti ir įgalinanti aplinka, yra užtikrinama mokymo veiklų ir informacinių resursų įvairovė. Mokymo konteksto (mokyklos socialinio psichologinio klimato) veiksnių analizė rodo, kad mokiniai ir jų tėvai dabartinę mokyklą vertina kaip pasižyminčią lanksčia taisyklių sistema, aiškiais drausmės, elgesio ir tvarkos reikalavimais. Mokinių nuomone, dabartinė mokykla pasižymi orientacija *į mokinius, pripažįsta ir toleruoja mokinių individualius skirtumus ir poreikius*.

Tačiau ir dabartinėje, ir geroje mokykloje jiems svarbu mokyklos dėmesys ne tik mokymosi veiklų ir resursų įvairovei, bet ir mokyklos tvarkai. Respondentų nuomone, *gera* mokykla turi sukurti saugią edukacinę aplinką, joje turi būti nekintantys drausmės, tvarkos ir standartinio elgesio reikalavimai.

Edukacinės aplinkos faktorių analizė išryškino esminius dabartinės ir geros mokyklos bruožus įvairių ugdymosi paradigmų požiūriu. Tyrimo duomenys rodo, kad dabartinė mokykla derina aktyvaus mokymosi, mokinių ir mokytojų sąveikos ir mokyklos poveikio mokiniui paradigmas. Vis dėlto poveikio mokiniui paradigma dabartinėje mokykloje yra ryškiausia. Geroje mokykloje pageidautinos ryškesnės aktyvaus mokymosi ir mokinių bei ugdytojų sąveikos tendencijos, bet išlieka reikšminga ir ugdymo kaip poveikio mokiniui paradigma. Poveikio paradigma labiausiai išryškėjo mokyklos klimato dimensijoje. Nors dabartinėje mokykloje mokyklos klimatas kuriamas bendradarbiaujant mokyklos bendruomenei, lanksčiai, atsižvelgiant į mokinių nuomonę (sąveikos paradigma), tačiau skirtingai, nei apibūdindami dabartinę mokyklą, kaip lanksčiai sprendžiančią drausmės ir tvarkos problemas, geros mokyklos ugdymosi aplinkoje mokiniai, tėvai ir pedagogai akcentavo poveikio paradigmą ir griežtokas drausmės ir elgesio problemų sprendimo priemones.

Esminiai žodžiai: edukacinė aplinka, mokymosi aplinka, poveikio, sąveikos ir mokymosi paradigmos, mokyklos klimatas, šiuolaikinė mokykla.

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