LITHUANIAN EDUCATION SYSTEM PROBLEMS: SENIOR CLASS STUDENTS' POSITION

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Abstract. Various changes are taking place in Lithuanian comprehensive schools in recent years. Not all of them can be considered positive and making the system's work effective. The changes taking place encourage natural interest in them. It is necessary not only to fix the current state, but to search for the ways how to optimize the changes taking place and to control them. Education is a complex, manifold phenomenon, the researches of which are complicated and complex as well. In this article Lithuanian comprehensive school senior class pupils' position on current education questions is analysed: preparation and teaching/learning process evaluation, the identification of advantages and disadvantages of education system and other. It is revealed how Lithuanian comprehensive school pupils value current education system, teacher provided knowledge quality and ability to prepare students for further studies at universities and other higher schools.

Keywords: comprehensive school, education system, evaluation, factor analysis

Introduction

In the process of intensive changes appearing in education system, it is necessary to have the more objective and full information from different sources about processes taking place in these systems that we could make adequate and timely decisions. Practically, educational researches are carried out in every country, the participants of which are senior class pupils able to present valuable information about education improvement. For example, senior class pupils' opinion research, carried out in Finland showed that pupils lack computer science knowledge; they express their great interest in studying genuine computer science (Grandell, 2005). The newest researches carried out in Sweden showed that at least one third of the students are facing serious problems with the project work (Österlind, 2010). Various researches show differences in the terms of sex. Ferreira (2004) emphasizes that teaching strategies used at the different schools should be investigated and compared to ascertain why discrepancies are encountered.

Interest in Lithuanian Education system problems is naturally understandable. On the one hand, in the process of constant changes appearing in the education system, it becomes important to know the current situation at every moment in time; on the other hand, it is important, referring to the available information, to be able to model effective changes or to carry out certain prevention measures in the case of undesirable phenomena. Over the last decade a lot of surveys were carried out in foreign countries in which students took part (Robertson, 2000; Inagaki et al., 2004; Strand, 2007). Such researches on the most various questions are carried out in many countries. Attitude researches in Lithuania have already become an inseparable part of public discourse and are rather popular. An opinion exists that surveys are not a reliable method especially that very often we can guess what the predominant answers of the respondents will be. Such presumptions usually come true. However, even if the research confirms the presumptions it is not bad, because a survey carried out in a qualified way gives a lot of new and extra information about various ana-

lysed subjects. Especially that very often in the instruments of surveys, (e.g., questionnaires) open questions are presented as well, by which much deeper information is obtained.

National school evaluation agency is carrying out a students and their parents' opinions' research on school activities.[1)] The survey is carried out electronically. Over the last decade various kinds of researches were carried out during which it was sought to ascertain opinions and attitudes to various reality phenomena. Jankauskiene & Kardelis (2002) carried out 11 class students' (girls') attitude towards their body and control of weight research. The reasons of students' unwillingness to learn were analysed in 2002. It was found that students' unwillingness to learn is determined both by inborn and acquired students' qualities, which make influence on their relations with classmates, pedagogues, form attitude to studies (Ozolaitė & Zablockytė, 2008). A research on students, teachers and parents' attitude towards education was carried out in 2002 as well (Pruskus, 2008). In 2009 a research on comprehensive school primary class pupils' attitude towards world cognition subject and educational environment was carried out (Grigorjevas & Mačiukaitė, 2009). In the research primary class pupils' having ordinary development and pupils' having special educational needs, attitude differences towards world cognition as a subject, towards educational process and educational environment were analysed. Žygaitienė (2008) carried out a research on teacher and students' attitude towards students' eloquence and its education possibilities in a comprehensive school.

Speaking about comprehensive school problems, we would like to draw attention that finishing basic education programme, forthcoming 11-formers have already to decide which subjects apart from compulsory they are going to choose in the 11^{th} form and according to their individual programme are going to learn in the 11^{th} -12^{th} form. One part of the 10^{th} formers have already been made a decision which way they will turn into after finishing school, are interested in higher school programmes, admission requirements.

The others are still wondering among their choices. The latter year secondary education concentre students experienced not a few changes which were directly connected with their educational process. Therefore, it is very important how this process is being organised, what is social environment, what level and amount material basis is in one or another education institution, what school microclimate prevails during their learning period and it is especially important what support will be provided for them from school leaders and pedagogues preparing for school leaving exams.

Thus, the research object is Lithuanian education system evaluation. The research purpose is to ascertain how Lithuanian comprehensive school students (from upper secondary level) value current education system, teacher provided knowledge quality and ability to prepare students for further studies at universities or other higher schools. The main research questions are: i) how students value their preparation in different cognition spheres; ii) how students value teaching/learning process in Lithuanian comprehensive schools; iii) what advantages and disadvantages do students discern in Lithuanian education system; iv) do students trust in present Lithuanian education system; v) what changes as necessary do students discern.

Methodology of R**esearch**

General research characteristics

The research was carried out between February and May, 2010, i.e., during the second term of the school year. The research is based on the attitude that pupils' opinion and assessment researches are important because they allow to identify urgent problems or to specify already known ones. Referring to respondent suggestion analysis, we can suggest problem solution ways, evaluate possible consequences. Opinion researches are an effective means seeking to initiate the changes.

Having covered result analysis, the interpretations made by researchers were handed to selected respondent groups (on the whole 60 respondents) for

assessment. They were asked to comment on received results. Response qualitative analysis was carried out.

Instrument

In the research the authors' prepared questionnaire was used (Lamanauskas & Railienė, 2010), which comprised open and closed questions. Respondents were asked to assess the field in which they feel the strongest/the weakest. Two open questions were presented in the questionnaire, seeking to reveal the advantages and disadvantages of Lithuanian education system referring to respondents. Also, 20 statements were presented in the questionnaire about teaching/learning in Lithuanian comprehensive schools (ranking scale was applied: 'agree', 'partly agree', 'do not agree') and they were asked to evaluate. The question about trust in our present education system was presented. The questionnaire also included a demographical part.

Research sample and geography

11 and 12 form pupils of Lithuanian comprehensive schools participated in the research. On the whole, 1150 questionnaires were acknowledged acceptable. Distribution of respondents according to forms and sex is presented in Table 1.

Table 1. Information about the respondents (N/%)

Form	**Sex**		**Total**
	Female	Male	
The 11th form	408/59.0	246/53.7	654/56.9
The 12th form	284/41.0	212/46.3	496/43.1
	692/100.0	458/100.0	1150/100.0

The participants of the research according to their geographical position were distributed as follows: Anykščiai (39, one school), Pasvalys (33, one

school), Kretinga (53, one school), Vilnius (202, three schools), Kamajai (57, one school),), Plungė (79, two schools), Šiauliai (103, three schools), Ukmergė (59, two schools), Kėdainiai district (126, three schools), Prienai (60, one school), Kaunas district (59, one school), Kėdainiai (126, three schools), Utena (49, one school), Alytus (61, two schools), other places (44). Thus, respondents from more than 25 Lithuanian comprehensive schools participated in the research. Research sample is considered sufficiently representative.

Statistical data analysis

In order to analyse research data, measures of descriptive statistics are applied (absolute and relative frequencies, popularity/significance indexes). To identify differences between variables, non parametric chi-square (χ^2) criterion is applied. Also t-test for the significance of the difference between the means of two independent samples is applied. 20 statements were evaluated applying three ranking scale. Every statement was given the calculated popularity/ significance index ($0 \leq PI/SI \leq 1$). The closer is PI value to 1, the more important, more significant is the statement to the respondent, or respondent better approves of it. A 20 statement factor analysis was carried out. The main aim of the factor analysis is to reduce the number of variables. Data, obtained on the basis of sample absolutely suit for carrying out factor analysis. Two methods were applied in order to evaluate whether the data set was appropriate for the factor analysis: Bartlett`s Test of Sphericity and Kaiser-Meyer-Olkin (KMO) test. Sample suitability for factor analysis results will be presented in Table 2.

Table 2. KMO and Bartlett's test results

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.835
Bartlett's Test of Sphericity	Approx. Chi-Square	3336,265
	df	190
	Sig.	0.000

Table 2 indicates that all values are quite high (Rivera & Ganaden, 2001; Наследов, 2005). KMO test value is 0.835. Bartlett's Test of Sphericity tests the null hypothesis that the correlation matrix is an identity matrix. In this case approx. Chi-Square value is 3336.265 and $p<0.000$. These results clearly show that data can be used for factor analysis. A loading of 0.40 for an item to define a factor was applied based on recommendations (Ferguson & Cox, 1993). The SSPS statistics batch is used as an instrument for data processing.

Results of research

The purpose was to ascertain how the respondents value their preparation in various fields. The obtained results are presented in Table 3.

Table 3. The evaluation of the respondents' preparation (N/%)

Subject /field	**The strongest preparation**		**The weakest preparation**	
	N	%	N	%
Mathematics	204	17.7	319	27.7
Lithuanian language and literature	324	28.2	173	15.0
Natural sciences	218	19.0	162	14.1
ICT	71	6.2	87	7.6
Foreign languages	151	13.1	239	20.8
Humanitarian sciences	124	10.8	131	11.4
Arts	58	5.0	39	3.4
Total	1150	100.0	1150	100.0

In Table 3 one can see that the respondents have the strongest preparation in Lithuanian language and literature and natural sciences fields. In mathematics and foreign language fields the respondents have the weakest preparation. Generalised results do not show deeper differences that are possible, therefore, in Table 4 the results are presented according to the forms and sex of the respondents.

Table 4. Evaluation of the respondents' preparation: The strongest preparation (N/%)

Subject /field	Form		Sex		Total
	The 11th form	*The 12th form*	*Female*	*Male*	
Mathematics	117/17.9	87/17.5	108/15.6	96/21.0	204/17.7
Lithuanian language and literature	196/30.0	128/25.8	249/36.0	75/16.4	324/28.2
Natural sciences	100/15.3	118/23.8	119/17.2	99/21.6	218/19.0
ICT	51/7.8	20/4.0	23/3.3	48/10.5	71/6.2
Foreign languages	92/14.1	59/11.9	76/11.0	75/16.4	151/13.1
Humanitarian sciences	71/10.9	53/10.7	77/11.1	47/10.3	124/10.8
Arts	27/4.1	31/6.3	40/5.8	18/3.9	58/5.0
Total	654/100.0	496/100.0	692/100.0	458/100.0	1150/100.0

Analysing the obtained results according to the form you can see that differences exist. The 11th formers feel better prepared in foreign language field than 12th formers. The same can be said about Lithuanian language and literature. In the natural science field the 12th form students feel stronger than the 11th formers. It might be related with preparation for exams and further career. All these differences are statistically significant ($\chi^2 = 22.52$, df = 6, $p < 0.001$). Analysing results according to sex, we can see that girls are the strongest in Lithuanian language and literature field and boys in natural sciences and mathematics fields. The differences are also statistically significant ($\chi^2 = 75.92$, df = 6, $p < 0.000$). At least 3 times better prepared in ICT field are boys than girls.

The results are analysed how the respondents' position varies evaluating preparation according to a variable "the weakest preparation". The results are presented in Table 5.

Table 5. The evaluation of the respondents' preparation: the weakest preparation (N/%)

Subject /field	Form		Total	Sex		Total
	The 11th form	*The 12th form*		*Female*	*Male*	
Mathematics	179/27.4	140/28.2	319/27.7	196/28.3	123/26.9	319/27.7
Lithuanian language and literature	99/15.1	74/14.9	173/15.0	67/9.7	106/23.1	173/15.0
Natural sciences	101/15.4	61/12.3	162/14.1	104/15.0	58/12.7	162/14.1
ICT	44/6.7	43/8.7	87/7.6	52/7.5	35/7.6	87/7.6
Foreign languages	141/21.6	98/19.8	239/20.8	168/24.3	71/15.5	239/20.8
Humanitarian sciences	68/10.4	63/12.7	131/11.4	87/12.6	44/9.6	131/11.4
Arts	22/3.4	17/3.4	39/3.4	18/2.6	21/4.6	39/3.4
Total	654/100.0	496/100.0	1150/100.	692/100.0	458/100.	1150/100.

A statistically significant difference exists analysing the results of the respondents according to sex ($\chi^2 = 50.05$, df = 6, $p < 0.000$). The majority of boys think that they have got weak preparation in mathematics and Lithuanian language and literature fields. Girls think that they are the weakest in mathematics and foreign language field. No other significant differences were established. Analyzing the results according to the form, no significant differences were noticed ($p > 0.05$). Both the 11th formers and the 12th formers their preparation as the weakest evaluate similarly.

Table 6. Trust in present education system (N/%)

Level	Form		Sex		Total
	The 11th form	*The 12th form*	*Female*	*Male*	
Trust	41/6.3	30/6.0	48/6.9	23/5.0	71/6.2
Partly trust	397/60.7	271/54.6	421/60.8	247/53.9	668/58.1
Don't trust	216/33.0	195/39.3	223/32.2	188/41.0	411/35.7
Total	654/100.0	496/100.0	692/100.0	458/100.0	1150/100.0

An interesting parameter is the trust in education system (Table 6).. Existing various and very often controversial opinions in the society about

Lithuanian education system, this information in one way or another is forming students' opinion as well.

In Table 6 we can see that only 6.2% of the respondents trust in education system. More than one third of the respondents express distrust in education system. The great majority (58.1%) only partly trust in it. Analysing the results according to the form, we can see that there are not any statistically significant differences ($\chi^2 = 4.92$, df = 2, $p < 0.085$). Thus, both the 11^{th} formers and the 12^{th} formers do not trust in present education system. However, statistically significant differences according to sex were identified ($\chi^2 = 9.90$, df = 2, $p < 0.007$). There are more boys more than girls who distrust education system.

There have been analysed 20 statements (Appendix 1) about teaching/learning in comprehensive schools. The results are presented in Fig. 1.

Generally speaking, respondents agree, that atmosphere is suitable for learning at schools (SI=0.66), quality of knowledge provided at schools, on the whole, is good (SI=0.65), and teachers willingly give advice to students on different topics being learnt at school (SI=0.68). However, we need to emphasize that significance indexes are comparatively not high, though bigger than 0.50. 8 of 20 statement significance indexes are lower than 0.50. Therefore, we can surely claim that learning difficulties, as a matter of fact, are not related with communication problems (SI=0.30), the size of school, practically, does not determine teaching quality (SI=0.34). Also, we can see, that schools are insufficiently interested in students' learning needs (SI=0.35), do not pay proper attention to professional orientation (SI=0.38).

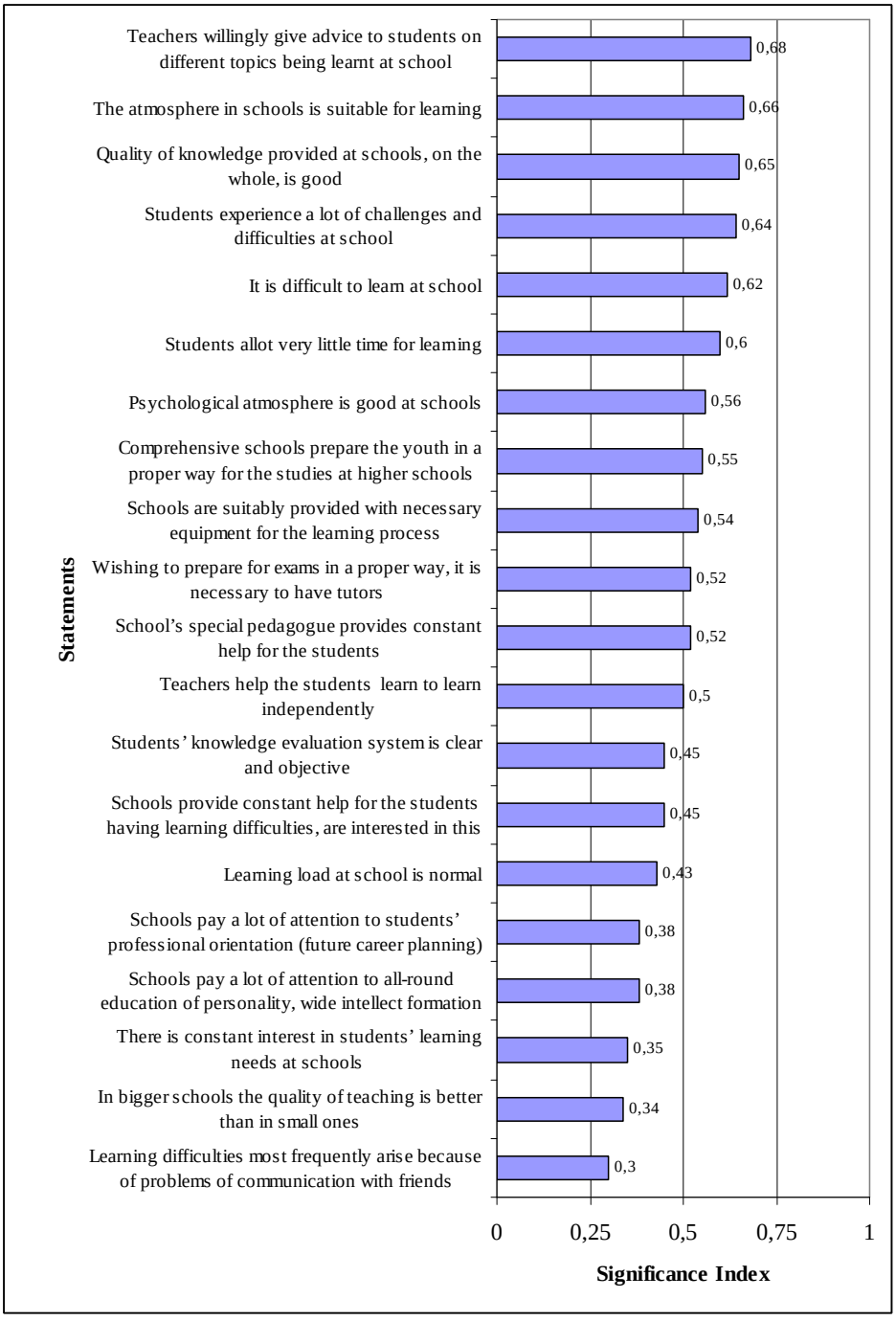

Fig. 1. Statements about teaching/learning in Lithuanian comprehensive schools (SI).

All statements were analysed from the point of view of possible statistical differences according to sex and form variables. Statistically significant differences according to forms are not identified, in all cases $p>0.05$. This shows that all statements are equally valued both by the 11^{th} formers and the 12^{th} formers. According to sex, statistically significant differences have already been identified by statements 1, 6, 10, 11, 12, and 16. These statements are differently evaluated by boys and girls. 2.7% of girls and 6.3 % of boys do not agree with the statement that quality of knowledge provided at schools is good, partly agree with the statement 61.7% of girls and 57 % of boys. The difference is statistically significant ($\chi^2 = 9.61$, df = 2, $p = 0.008$). Boys more critically value the quality of teaching than girls. 35.1 % of girls and 29.5 % of boys agree with the statement, that wishing to prepare properly for exams it is necessary to have tutors. Correspondingly, not agreeing with this statement, there are less girls than boys. The difference is statistically significant ($\chi^2 = 8.25$, df = 2, $p = 0.016$). Conditionally we can think that girls have bigger need for the help from outside (tutors), than boys. The respondents differently value the importance of the school size. More boys (21.8%) than girls (16.0%) agree with the statement, that in bigger schools the quality of teaching is better than in small ones ($\chi^2 = 8.19$, df = 2, $p = 0.017$). Boys are more critical than girls on the question of professional orientation/consultation. In general, the bigger part of the respondents think, that schools do not give sufficient attention to this activity field. 38.2% of girls and 45.6% of boys do not agree, that schools pay a lot of attention to professional orientation ($\chi^2 = 9.26$, df = 2, $p = 0.010$). Also, boys are more critical than girls as concerns special pedagogue's provided help for the students. 31.5% of girls do not agree with the statement, that special pedagogue gives the students constant help, whilst there are only 23.8% of boys who agree with this statement ($\chi^2 = 11.17$, df = 2, $p = 0.004$).

The results of factor analysis

All 20 statements' factor analysis was carried out. The five factors were extracted based on the Eigen Value Statistics (with the real value more than one). All these factors accounts for 46.68% of variance.

Table 7. Factor analysis results of the statements about teaching/learning in Lithuanian comprehensive schools

	FACTOR 1 ***The organization of teaching process***	**Factor loadings**	**SI & SD**
18.	Schools provide constant help for the students having learning difficulties, are interested in this	0.705	SI= 0.4686; SD= 0.2161
14.	There is constant interest in students' learning needs at schools	0.660	
16.	School's special pedagogue provides constant help for the students	0.643	
15.	Schools pay a lot of attention to all-round education of personality, wide intellect formation	0.595	
19.	Teachers help the students learn to learn independently	0.570	
12.	Schools pay a lot of attention to students' professional orientation (future career planning)	0.568	
20.	Teachers willingly give advice to students on different topics being learnt at school	0.512	
	FACTOR 2 ***Learning difficulties (complexity)***	**Factor loadings**	**SI and SD**
3.	It is difficult to learn at school	0.729	SI=0.5668 SD=0.1708
5.	Learning load at school is normal	- 0.708	
13.	Students experience a lot of challenges and difficulties at school	0.669	
	FACTOR 3 ***Teaching/learning atmosphere***	**Factor loadings**	**SI and SD**
8.	The atmosphere in schools is suitable for learning	0.696	SI=0.5900 SD=0.2478
9.	Psychological atmosphere is good at schools	0.668	
11.	Schools are suitably provided with necessary equipment for the learning process	0.521	
	FACTOR 4 ***Education quality***	**Factor loadings**	**SI and SD**
2.	Comprehensive schools prepare the youth in a proper way for the studies at higher schools	0.703	SI=0.5794 SD=0.1787
1.	Quality of knowledge provided at schools, on the whole, is good	0.655	
6.	Wishing to prepare for exams in a proper way, it is necessary to have tutors	- 0.571	

	FACTOR 5 ***Teaching/learning peculiarities***	**Factor loadings**	**SI and SD**
17.	Learning difficulties most frequently arise because of problems of communication with friends	0.671	SI=0.4138
7.	Students allot very little time for learning	0.562	
10.	In bigger schools the quality of teaching is better than in small ones	0.454	SD=0.2207

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 9 iterations.

Looking at Table 7, it is observed that there are 7 statements under the first factor, 3 statements under the 2nd factor, 3 statements under the 3rd factor, 3 statements under the 4th factor and 3 statements under the 5th factor. The first factor forms 14.43 % of total variance, the second factor constitutes 9.00 % of total variance, the third factor forms 8.56% of total variance, the fourth factor forms 8.12 % of total variance and the fifth factor constitutes 6.55 % of total variance.

Significance index was calculated for every factor (SI). The obtained result shows that the third factor has the strongest expression (SI=0.59). We can claim, that at schools, practically, prevails good psychological atmosphere and there is a suitable learning atmosphere. Factor 4 is in the second position (SI=0.57), showing that there is proper education quality and students are being prepared in a good way. The second factor (SI=0.56) shows, that it is still difficult to learn, learning load is still big, at school students experience a lot of challenges and difficulties. Factor 5 (SI=0.41) has the weakest expression, showing that learning difficulties are not related with peers or time which students allot to learning. The first factor is rather weak as well (SI=0.46). It shows, that schools pay insufficient attention to students' learning, their career planning, increasing their independence, giving help and support while learning.

A statistically significant deviation in terms of sexes has been obtained on the first, second and fourth factors. The null hypothesis H_0 about equal av-

erages is rejected at the level of significance and makes p <0.028, p<0.028, p<0.006.

Table 8. Factor significance indexes in terms of sex

	N		**SI**		**SD**	
	Female	*Male*	*Female*	*Male*	*Female*	*Male*
Factor 1	692	458	**0.47**	0.45	0.22	0.20
Factor 2	692	458	0.55	**0.58**	0.17	0.16
Factor 3	692	458	0.59	0.58	0.24	0.25
Factor 4	692	458	**0.59**	0.56	0.17	0.18
Factor 5	692	458	0.40	0.42	0.21	0.22

The first factor "*The organization of the teaching process*" is more significant for girls than for boys (t=2.20, df=1040, p=0.028). We can think that girls get more help and support from school than boys. This can be predetermined by openness of the girls, clearer expression and formulation of speech. Besides, boys, in general, lack deeper learning abilities, their identity is lower. The second factor is more significant for boys than girls (t=2.20, df=1148, p=0.028). We can think that learning for boys is more difficult, they experience more difficulties than girls. Boys' psychological tension is often bigger; they do not tend to search for help from outside. A statistically significant deviation has been consequently identified on factor 4. Girls tend to more positively evaluate education and provided knowledge quality than boys (t=2.77, df=1148, p=0.006). No significant deviations have been noticed on factors 3 and 5.

Having discussed the obtained deviations with the selected respondent group, such results were received (Table 9).

Table 9. Summary table of the respondents' commentaries

FACTOR 1 *The organization of teaching process*	**FACTOR 2** *Learning difficulties(complexity)*	**FACTOR 4** *Education quality*
• Girls learn consequently; • Are diligent; • Responsible attitude; • Ambitiousness; • The circle of interest is wider, not only the most necessary things; • More seriously look into life perspectives and responsibly plan the future; • Boys more often relate their future with going abroad, believing in luck there; • It is more complicated for boys to get concentrated in the lesson; • Boys choose specialities which require less knowledge, but more physical strength; • Girls pay more attention and time to learning, go into the heart of the matter; • Girls are more attentive; • The majority of boys choose any speciality and later look for a profitable job; • Girls like maximum; • Girls are more dutiful and feel bigger interest in learning; • Girls think, that "not educated girl is much worse than not educated boy" • Boys have a wider job choosing spectrum (can do a job which needs more physical strength;	• Boys are more close and more often keep everything inside; • Boys miss more lessons; • Are lazy; • Are more absent-minded and can't concentrate; • Not responsible attitude to learning, like to "do away with" unfavourable situations; • Boys mature later than girls; • Boys do not withstand high learning requirements; • Not concentrated in the lessons; • It is "shame" for boys to learn well; • Not attentive, not diligent; • Because most of the pedagogues are women, for girls it is easier to please them than for boys; • Most boys' restraint does not allow them to reveal themselves; • Mostly learn one subject or two, which they like, but the others don't. • Do not trouble themselves in working with the bigger amount of informa-	• Girls care more about their future beforehand and boys tend to postpone everything to the last minute. • Girls more seriously look at everything, are more interested, concentrated and boys are absent-minded, pay less attention to studies. • Boys tend to rebel and girls react to everything more calmly. • Girls are not cleverer but they are more diligent. • Girls tend to learn more, therefore provided knowledge is more understandable to them, and they value the received knowledge. It naturally happens. • Girls are more mature. • Quicker maturing, girls understand the essence of learning and knowledge more. • Evaluating the knowledge, girls seek maximum, and for boys it is enough to know minimum. • From the majority of

• Different boys and girls' character features have quite a big influence	tion source. They limit themselves with the smaller one.	knowledge they are able to choose useful information for them.

The same information was carried out in terms of forms. According to this criterion no statistically significant deviation was established. In all cases $p > 0.05$.

Discussion

Research showed that students' evaluations differ in terms of sex. Regardless common education problems at school, both girls and boys value certain things differently. Often the researchers consider sex variable one of the most important in educational researches. The carried out research revealed quite a lot deviations in terms of sex. For example, teaching process organization is more important for girls than for boys. Research results also show that it is more difficult to learn for boys, they experience more difficulties than girls. The respondents themselves notice that boys are more reserved and usually keep everything inside, they miss more lessons and at last they are more absent-minded and so on. Of course, the other respondents oppose, claiming that sex is not a good predictor of academic skills, interests or even emotional characteristics.[2)] Girls think they are cleverer, more successful and harder working than boys from as young as four, a study has found.[3)] The differences between boys and girls' learning are identified in researches carried out in different countries: Indonesia (Deolalikar, 1993), Ghana (Lavy, 1996), Great Britain (Elwood, 2005; Strand, 2007), USA[4)] and others.

Our research also confirms this position, because girls hold, namely, such position. On standardized achievement tests, females typically surpass males in writing ability, reading achievement, and certain other verbal skills while males surpass females in science and mathematics.[5)] Our carried out research confirmed that girls are the strongest in Lithuanian language and literature

field and boys in natural sciences and mathematics field. This once again proves that despite of all similarities, girls and boys learn differently. The researchers notice that teachers usually do not understand the differences in an appropriate level (Gurian & Henley, 2002). It is interesting, that the researchers themselves very exactly confirmed statistically identified deviations and the interpretations handed by the researchers, giving their commentaries during the discussion. Thus, the essential questions – 'why do girls do better at school than boys' and 'what are the barriers to raising the attainment of boys' – require exhaustive answers. Closing the gap between boys and girls' attainment in Lithuanian school also is a very important issue not only for the future educators and scholars, but also for the politicians.

Conclusions

Generalizing research results we can claim, that: (i) Senior students emphasize equivalent partnership between a student and a teacher, which could be supported by mutual cooperation; (ii) In students' opinion, schools are insufficiently interested in students' learning needs, do not pay proper attention to professional orientation, very often students do not get help and advice when they need it; (iii) Senior class students critically value current education system, express rather big distrust of it (more than one third distrust it). Boys rather than girls distrust education system. Yearly changes, instability, not knowing about novelties and constant reforms raise reasonable worry for them; (iv) It was found, that the respondents are prepared best for Lithuanian language and literature and natural science field. The respondents are the weakest in Maths, foreign language field, though this year foreign language state exam results showed that only a very small percent of the 12^{th} formers didn't pass foreign language exam; (v) It was stated, that girls are the strongest in Lithuanian language and literature field, and boys in natural science and Maths field. A tendency is noticed, that choosing subjects in 11-12 forms, the bigger percent of boys just choose the expanded course of sciences; (vi) It is more diffi-

cult to learn for boys, they experience more difficulties than girls. However, girls tend to evaluate education and provided knowledge quality more favourably than boys.

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NOTES

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APPENDIX

Statements about teaching/learning in Lithuanian comprehensive schools (N/% and SI)

Statements	**Agree**	**Partly agree**	**Do not agree**	**SI**
20. Teachers willingly give advice to students on different topics being learnt at school	519/45.1	539/46.9	92/8.0	0.68
8. The atmosphere in schools is suitable for learning	485/42.2	557/48.4	108/9.4	0.66
1. Quality of knowledge provided at schools, on the whole, is good	414/36.0	688/59.8	48/4.2	0.65
13. Students experience a lot of challenges and difficulties at school	444/38.6	585/50.9	121/10.5	0.64
3. It is difficult to learn at school	440/38.3	556/48.3	154/13.4	0.62
7. Students allot very little time for learning	408/35.5	572/49.7	170/14.8	0.60
9. Psychological atmosphere is good at schools	353/30.7	584/50.8	213/18.5	0.56
2. Comprehensive schools prepare the youth in a proper way for the studies at higher schools	273/23.7	738/64.2	139/12.1	0.55
11. Schools are suitably provided with necessary equipment for the learning process	337/29.3	580/50.4	233/20.3	0.54
6. Wishing to prepare for exams in a proper way, it is necessary to have tu-	378/32.9	442/38.4	330/28.7	0.52

tors				
16. School's special pedagogue provides constant help for the students	327/28.4	535/46.5	288/25.0	0.52
19. Teachers help the students learn to learn independently	272/23.7	605/52.6	273/23.7	0.50
4. Students' knowledge evaluation system is clear and objective	182/15.8	687/59.7	281/24.4	0.45
18. Schools provide constant help for the students having learning difficulties, are interested in this	217/18.9	611/53.1	322/28.0	0,45
5. Learning load at school is normal	250/21.7	502/43.7	398/34.6	0.43
12. Schools pay a lot of attention to students' professional orientation (future career planning)	215/18.7	462/40.2	473/41.1	0.38
15. Schools pay a lot of attention to allround education of personality, wide intellect formation	138/12.0	605/52.6	407/35.4	0.38
14. There is constant interest in students' learning needs at schools	134/11.7	543/47.2	473/41.1	0.35
10. In bigger schools the quality of teaching is better than in small ones	211/18.3	361/31.4	578/50.3	0.34
17. Learning difficulties most frequently arise because of problems of communication with friends	121/10.5	442/38.4	587/51.0	0.30

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