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The paper. The paper is carefully formatted according to the template of the journal (see bellow). Special attention is paid to the exact application of the Harvard referencing convention to both continuous citations and list of references. If an electronic source has the DOI number assigned, also it will be provided in the list of references. Manuscripts are submitted via the editorial system in the DOC.

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EDITORIAL

With this first issue of the year 2016 (Vol. 9, no. 1), all members of the Editorial board would like to wish you success in both personal and professional life. We all hope that the ongoing year would serve you many opportunities, which might be completed. Moreover, we all hope that the ERIES Journal may be a part in these achievements and help to publish results of a conducted research.

With this first issue, which you hold in your hands, we are glad to introduce four articles from University of Economics, Prague; Osmaniye Korkut Ata University, Turkey; and South-West University, Bulgaria. We are grateful that the ERIES Journal has again attracted diverse authors from different international institutions. It is a commitment for the Editorial board to keep improving the journal quality and being the leading journal in the education research in the Czech Republic.

In the first article, authors Miroslava Otavová and Irena Sýkorová present and discuss results of statistical analysis of differences among scores obtained by students of different faculties at the University of Economics in Prague. This analysis is based on the scores from 2,256 students who took basic mathematics course during the academic year 2013/2014. The authors found out that differences among scores from different faculties exist. What is more, the authors proved that faculty is a factor that determines the score obtained from mathematics course.

The second article from authors Dobrinka Peicheva and Valentina Milenkova deals with the development of the media education in Bulgaria. The authors point out on the fact that, in most of the European countries, media education is not yet positioned in the relevant framework, as national mandatory requirements outlining its parameters in education systems are still missing. From this reason, the authors provide a review study to analyse historical roots and to place problems that accompany media education in Bulgaria. In addition, successful Bulgarian experience in media literacy is presented, followed by general recommendations with respect to the future development in this field.

The following third article, from Kristýna Krejčová,

refers to an interesting research regarding a development of self-reflective skills of future teachers. To achieve this development, teachers need to adequately realize their strengths and weaknesses. For this purpose, the author asked students at Department of Economic Teaching Methodology at University of Economics, Prague, to write an essay called *'Why am I supposed to be a good teacher?'*. Using content analysis of self-reflective statements and participants' personal construct of an expert teacher, the author gained important feedback about skills that should be mainly trained during the education of the prospective teachers. The most important strengths are related to personality and social skills, whereas the weaknesses are also mainly related to Personality and Social skills, followed by a volition.

The last article from Ceyhun Yúkselir focuses on perceptions and perspectives of English Foreign Language (EFL) teachers integrating internet into language learning and teaching. The article compares the differences between EFL university instructors' perceptions and state and private school EFL teachers' perceptions. The author disseminated questionnaire among 82 participants who stated their perceptions towards integrating internet-assisted language learning into EFL instruction, what types of internet resources they use to enhance language learning, and what kind of barriers prevent the use of the internet in EFL classes. Both quantitative and qualitative results demonstrate that although both instructors and teachers showed positive attitude towards internet-assisted language teaching.

We would like to thank to all reviewers who contributed to this first issue. Nevertheless, we would also like to thank all the authors who have submitted their manuscripts to the ERIES Journal. Moreover, we hope that all our readers will find this first issue of the year 2016 interesting, and we also hope that the ERIES Journal will contribute to the field of efficiency and responsibility in education as it has contributed so far.

Sincerely,

prof. RNDr. Jaroslav Havlíček, CSc.

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DIFFERENCES IN RESULTS OBTAINED BY STUDENTS OF DIFFERENT FACULTIES

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Highlights

- Scores obtained from tests may be analysed to obtain useful information
- Students from different faculties score differently
- The differences can be observed during the semester as well

Abstract

The paper presents and discusses the results of statistical analysis of differences among scores obtained by students of different faculties of the University of Economics in Prague. The analysed dataset contains the scores for 2256 students that took basic mathematics course during the academic year 2013/2014.

A two way analysis of variance was performed with semester and faculty as main factors. The interaction between these two factors was also considered. Students have to take two tests. At first, the sum of the scores obtained from both tests is analysed and then, the two tests are analysed separately. It turns out that the significance of factors is the same in the three analyses. The assumptions of linear models are verified. Due to problem of heteroscedasticity, weighted least squares are used and the possibility of using Box-Cox transformation is also discussed, as the errors are not normally distributed. Finally, the differences between the faculties are described.

Keywords

Analysis of variance, weighted least squares, linear regression, test in mathematics

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Introduction

Each student of the University of Economics in Prague has to take a mathematics course as the basic concepts of linear algebra and mathematical analysis are needed in other courses throughout the rest of student's studies. The Department of Mathematics of the Faculty of Informatics and Statistics offers the basic mathematics course in both, winter and summer semester and this course is compulsory for most of the study programmes. The syllabus of this course is identical to the textbook written by Klůfa (2013b). Beside this course, a similar course is offered in English for foreign exchange students. The latter course follows the textbook written by Klůfa and Kaspříková (2013).

Throughout the course, students have to take a mid-term test which is worth 20 points, a final test which is worth 40 points and an oral examination worth 40 points. The final grade is calculated as the sum of the scores from the three abovementioned parts and in order to pass, student has to obtain at least 60 points. The scores of the enrolled students provide a lot of information to the staff of the department and may be further analysed in order to improve teaching and evaluation methods. Different statistical methods can be used for this analysis. Hypothesis testing can be used in analysing the dependence of student's performance on his demographic and behavioural traits (Kaspříková, 2012), while probability is used for analysing student's performance in (Klůfa, 2012) and (Klůfa, 2013a). The analysis of dependence of student's performance on his abilities by using latent variables framework can be found in (Kaspříková, 2013), while correlation between the test scores and areas covered in the test is discussed in (Kaspříková, 2011). Otavová and Sýkorová (2014) analyse association between test scores in the mid-term and final test by using contingency table.

Several papers deal with factors which influence students' scores and performance. Pacáková (2013) discusses how students' test scores and students' motivation is influenced by allowing students to pass the course by obtaining enough points from tests during the semester. Sengodan and Iksan (2012) discuss types of intrinsic motivation in learning mathematics and differences in this motivation between genders. Boháčková and Brožová (2012) analyse which factors influence students' scores, differences among the students of different study programmes at one particular faculty and whether students obtain better scores when retaking the exam. Moreover, they discuss differences between performance of full-time and part-time students. Hassanbeigi et al (2011) study the relationship between several study skills (time management, concentration, test anxiety, etc.) and academic performance of students. Clotfelter et al (2007) discuss how teacher qualities influence students' results.

The purpose of this paper is to analyse the differences among the scores of students from different faculties of the University of Economics in different semesters. The drawback of the course is that the same course is followed by students of different study programmes at different faculties and it might be of interest whether there are differences in performance among students from different faculties. Hence, the aim is to discuss whether it is appropriate to have one common course for students of different faculties and whether the faculty of a student might be a factor that influences his performance. This paper is an extension of our previous paper (Otavová and Sýkorová, 2015).

Analysis of variance will be applied to the available dataset and statistical software R will be used for this analysis. At first, the sum scores from both tests will be analysed and then scores

from both tests will be analysed separately, to verify whether the overall difference hold throughout the semester.

Materials and Methods

Data description

The dataset contains information about 2256 students who took the course of Mathematics for Economists (in Czech language) in the academic year 2013/2014. The dataset contains the score obtained in the mid-term test, the score obtained in the final test, the sum of these two scores, the faculty to which the student belongs (Faculty of Finance and Accounting – F1, Faculty of International Relations – F2, Faculty of Business Administration – F3, Faculty of Informatics and Statistics – F4 and Faculty of Economics – F5) and the semester in which the course was taken. The score from each test is considered as a continuous dependent variable and the other two variables, semester and faculty are considered as categorical factors. Table 1 shows the contingency table with number of observations, i.e. students, in each combination of categories.

		Faculty					Total
		F1	F2	F3	F4	F5	
Semester	Winter	244	310	227	534	3	1318
	Summer	284	382	179	89	4	938
Total		528	692	406	623	7	2256

Table 1: Contingency table of number of students in each treatment

We have to note that the course is not compulsory for students of Faculty of Economics (F5), as they have another course in mathematics. This fact is reflected in number of students enrolled from this faculty. Students from this faculty are either those who need an additional explanation as they are not confident in mathematics, or those who want to earn credits easily.

Statistical methods

The score from a test is a continuous response variable, while the independent variables are categorical factors. For this reason a two-way analysis of variance (ANOVA) is an appropriate method to analyse the differences among the groups, or treatments. The first factor, faculty, has 5 levels (F1, F2, F3, F4, F5), while the second factor, semester, has 2 levels (winter and summer). Hence, 10 treatments, or groups, are considered. Both of the factors are fixed factors, or fixed effects, as they are not a random sample from a greater population. For further information about difference between ANOVA with fixed effects, random effects and mixed effects see (Kutner et al., 2005) or (Sahai and Ageel, 2000).

As can be seen from Table 1, the number of observations in each treatment is not the same. Therefore, a linear regression approach has to be used instead of the usual ANOVA approach based on between and within group variability. At first, the model with interaction is considered, which allows the effect of faculty to be different in each semester. The considered model is in the following form:

$$Y_{ijk} = \lambda + \alpha_1 X_{ijk1} + \alpha_2 X_{ijk2} + \alpha_3 X_{ijk3} + \alpha_4 X_{ijk4} + \beta_1 X_{ijk5} + \gamma_1 X_{ijk1} X_{ijk5} + \gamma_2 X_{ijk2} X_{ijk5} + \gamma_3 X_{ijk3} X_{ijk5} + \gamma_4 X_{ijk4} X_{ijk5} + \varepsilon_{ijk}, \quad (1)$$

$i = 1, 2, 3, 4, 5; j = 1, 2; k = 1, \dots, n_{ij},$

where:

Y_{ijk} is the number of points obtained by the k -th student from i -th faculty in j -th semester,

X_{ijk1} takes value of 1 if student is from the Faculty of Finance and Accounting, 0 otherwise,

X_{ijk2} takes value of 1 if student is from the Faculty of International Relations, 0 otherwise,

X_{ijk3} takes value of 1 if student is from the Faculty of Business Administration, 0 otherwise,

X_{ijk4} takes value of 1 if student is from the Faculty of Informatics and Statistics, 0 otherwise,

X_{ijk5} takes value of 1 if student took the course in winter semester, 0 if in the summer semester,

coefficients $\alpha_1, \alpha_2, \alpha_3, \alpha_4$ correspond to the effect of faculty,

coefficient β_1 corresponds to the effect of semester,

coefficients $\gamma_1, \gamma_2, \gamma_3, \gamma_4$ correspond to the interaction effect between semester and faculty,

λ is an intercept,

ε_{ijk} is the unexplained random error term,

and n_{ij} is the number of observations in treatment defined by i -th faculty and j -th semester.

In order to test the significance of interaction terms, a reduced model has to be built:

$$Y_{ijk} = \lambda + \alpha_1 X_{ijk1} + \alpha_2 X_{ijk2} + \alpha_3 X_{ijk3} + \alpha_4 X_{ijk4} + \beta_1 X_{ijk5} + \varepsilon_{ijk}, \quad (2)$$

$i = 1, 2, 3, 4, 5; j = 1, 2; k = 1, \dots, n_{ij}.$

Afterwards a partial F-test is performed:

$$\begin{aligned} H_0: & \gamma_1 = \gamma_2 = \gamma_3 = \gamma_4 = 0, \\ H_a: & \text{not all } \gamma_i \text{ are equal to } 0, \end{aligned} \quad (3)$$

$$F^* = \frac{\frac{SSE(2) - SSE(1)}{df_2 - df_1}}{\frac{SSE(1)}{df_1}}, \quad (4)$$

where:

SSE is the sum of squared errors from the model (1) or model (2), calculated by the following formula:

$$SSE = \sum_{i=1}^5 \sum_{j=1}^2 \sum_{k=1}^{n_{ij}} (Y_{ijk} - \hat{Y}_{ij})^2, \quad (5)$$

df is the number of degrees of freedom in the corresponding model calculated as the sample size (2256 students) minus the number of parameters in the model,

\hat{Y}_{ij} in (5) is the fitted value estimated by the model.

F^* statistics defined in (4) follows Fisher-Snedecor distribution with corresponding degrees of freedom: $F^* \sim F(df_2 - df_1; df_1)$. In case of one fails to reject the null hypothesis, the partial F-tests for significance of main effects of factors faculty and semester can be performed. Model (2) becomes the full model and the reduced models are built in the same way as in case of testing for the significance of interaction term, i.e. by omitting the terms and coefficients corresponding to the main effect tested. In this case type II sum of squares will be presented in the ANOVA table. On the other hand, if the interaction term is significant, i.e. the null hypothesis in (3) is rejected, the main effects should remain in

the model even though they might be insignificant. In this case type III sum of squares should be used. For further information about the different types of sum of squares, i.e. different ways of specifying full and reduced models, see (Kutner et al., 2005). If all the coefficients in the model (1), turn out to be insignificant then there is no significant difference among the results of students from different faculties and in different semesters.

The regression model has to fulfil several assumptions so that the statistical inference is valid. The errors should be independent from each other, the variance should be the same in each treatment, the errors should come from the normal distribution and the mean of the errors should be zero. Apart from these assumptions, the dataset should not contain any outliers or influential observations. For further details see (Kutner et al., 2005).

Results

In this part, the results of three separate analyses are presented. At first, the results of analysis of variance and descriptive statistics for the sum of scores from both tests are presented. Subsequently, results of analysis of variance and descriptive statistics for mid-term test are presented and finally, the results and descriptive statistics for final test score are presented.

Sum of Scores from Both Tests

Table 2 shows the descriptive statistics for each of the treatments. One can see that the means are different in each group. The apparent problem is that the distribution of the scores in most of the treatments is negatively skewed as the median is higher than the mean of a treatment. This was also discussed in (Otavová and Šýkorová, 2014). This problem usually yields to skewed errors in the regression model, which means that the errors in the model will not be normally distributed. This may then cause the statistical inference to be invalid.

Faculty	Semester	Mean	Median	Min	Max	Standard deviation	Number of obs.
F1	Winter	42.39	44.00	8.00	60.00	11.47	244
	Summer	40.25	42.00	2.00	60.00	12.24	284
F2	Winter	36.95	39.00	0.00	60.00	13.34	310
	Summer	40.02	41.75	8.00	60.00	11.98	382
F3	Winter	38.92	40.00	0.00	60.00	12.52	227
	Summer	38.21	38.00	4.00	60.00	12.29	179
F4	Winter	33.16	34.50	0.00	60.00	13.72	534
	Summer	32.15	32.00	4.00	55.00	11.53	89
F5	Winter	23.33	25.00	8.00	37.00	14.57	3
	Summer	45.00	45.50	34.00	55.00	9.35	4

Table 2: Descriptive statistics for each treatment

A more severe problem is the presence of heteroscedasticity, i.e. the variances are not equal for each treatment. Table 3 presents the results of Brown–Forsythe test for homogeneity of variances and it can be seen that the null hypothesis of homoscedasticity is rejected at 5% level of significance. This violation of the assumption of homoscedasticity can be solved by using weighted least squares, where the weight of an observation is set up to be the inverse of the variance of the treatment to which the observation belongs:

$$w_{ijk} = \frac{1}{s_{ij}^2}. \quad (6)$$

	Df	F-value	P-value
Treatments	9	2.5008	0.008
	2246		

Table 3: Brown–Forsythe test for the homogeneity of variances

The boxplots on Figure 1 summarize Table 2 and Table 3 in a graphical way. In addition to the presence of heteroscedasticity and non-normality of the response variable score, some outliers are detected. Since the sample size is large and only a few students were turned out to be outliers, there is no need to remove them from the sample.

Table 4 presents the ANOVA table after fitting the linear regression model by using weighted least squares. It can be seen that the interaction between the two factors is significant at 5% level of significance, which proves that the differences in the average scores for students of different faculties are not the same in each semester. As the interaction is significant there is no need to look at the main effects of semester and faculty and both of them have to be retained in the model. Type III tests are showed in the table as the interaction effect is significant.

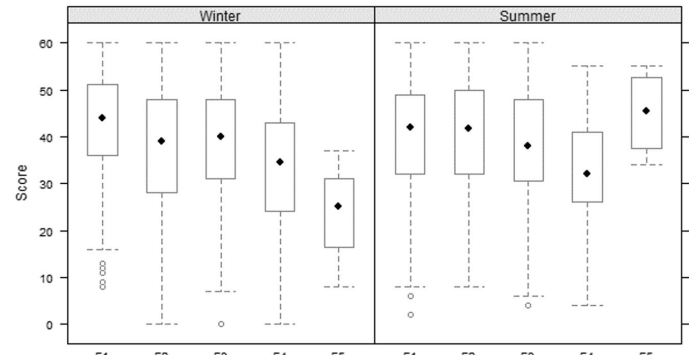


Figure 1: Boxplots for each treatment

Source of variation	Df	Sum of squares	Mean square	F-value	P-value
Intercept	1	4837.6	4837.6	3203.557	0.000
Faculty	4	61.3	15.3	10.157	0.000
Semester	1	6.8	6.8	4.483	0.034
Faculty*Semester	4	32.2	8.1	5.331	0.000
Errors	2246	3391.7	1.5		

Table 4: ANOVA table (Type III sum of squares)

Concerning, the Gauss–Markov assumptions of linear models, the normality of errors assumption is violated, which is caused by the fact that the original response variable, i.e. sum of scores from both tests, is negatively skewed. A Box–Cox transformation could be applied to the response variable score which would made the distribution of the response variable score and the errors of the model more normal.

However, the violation of the assumption of normality of errors in the model with non-transformed response variable does not cause the statistical inference (F-tests) to give invalid conclusions and the results would be similar to those presented in Table 4. This is caused by the fact that the sample size is large enough. Moreover, the scores of students after the transformation loose a meaningful interpretation. For these reasons the results of analysis on non-transformed variable are presented in this paper. For further information about the Box–Cox transformation see (Kutner et al., 2005).

Mid-term Test

In this part, the results for mid-term test are presented. From the descriptive statistics in Table 5, it can be noticed that the distribution of scores in most treatments is negatively skewed. Table 6 presents Brown-Forsythe test for homogeneity of variance and at 5% level of significance it can be concluded that heteroscedasticity is present, i.e. the variances are not equal in each treatment. Therefore, weighted least squares have to be used. Figure 2 again summarizes the findings in Table 5 and Table 6 in graphical way. Table 7 presents the results of analysis of variance where type III tests are used. As the interaction is highly significant, the main effects are kept in the model and each semester, there are differences among faculties each semester. The results of this analysis suggest that students of different faculties score differently even in the middle of the semester and should be approached in different way from the beginning of the course.

Faculty	Semester	Mean	Median	Min	Max	Standard deviation	Number of obs.
F1	Winter	14.52	16.00	0.00	20.00	4.49	244
	Summer	13.78	15.00	0.00	20.00	4.94	284
F2	Winter	12.26	13.00	0.00	20.00	5.33	310
	Summer	13.85	14.00	0.00	20.00	4.53	382
F3	Winter	13.17	14.00	0.00	20.00	4.79	227
	Summer	12.49	13.00	0.00	20.00	5.20	179
F4	Winter	11.32	12.00	0.00	20.00	5.11	534
	Summer	11.17	12.00	1.00	20.00	4.54	89
F5	Winter	8.67	8.00	3.00	15.00	6.03	3
	Summer	15.50	16.00	12.00	18.00	2.65	4

Table 5: Descriptive statistics for each treatment

	Df	F-value	P-value
Treatments	9	2.1252	0.025
	2246		

Table 6: Brown–Forsythe test for the homogeneity of variances

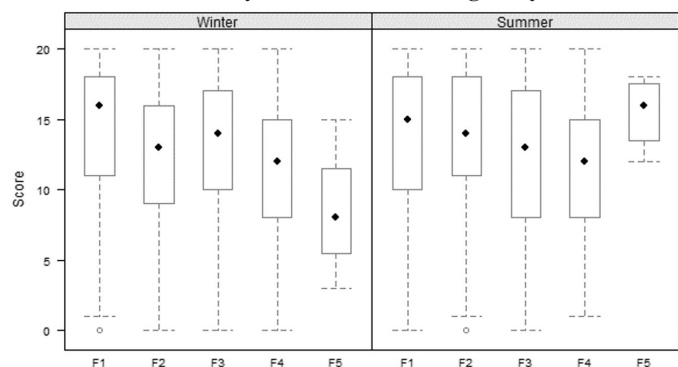


Figure 2: Boxplots for each treatment

Source of variation	Df	Sum of squares	Mean square	F-value	P-value
Intercept	1	3207.5	3207.5	2197.522	0.000
Faculty	4	52.0	13.0	8.908	0.000
Semester	1	4.7	4.7	3.242	0.072
Faculty*Semester	4	38.4	9.6	6.574	0.000
Errors	2246	3278.2	1.5		

Table 7: ANOVA table (Type III sum of squares)

Final Test

In the last analysis, the score obtained from the final test was analysed. From the descriptive statistics in Table 8 one can notice that the distribution is negatively skewed like for the sum of scores and the score obtained in mid-term test. Table 9 presents the results of Brown-Forsythe test. One can see that at 5% level of significance we reject the null hypothesis of homoscedasticity. Therefore, the variance is different in each treatment and weighted least squares have to be used. Figure 3 summarises the descriptive statistics in a graphical way and Table 10 presents ANOVA table. Again, type III tests were used as the interaction, between semester and faculty turned out to be significant. Hence, the differences among faculties are different in each semester and the differences hold even during the exam period.

Faculty	Semester	Mean	Median	Min	Max	Standard deviation	Number of obs.
F1	Winter	27.87	29.00	0.00	40.00	8.66	244
	Summer	26.47	27.50	0.00	40.00	9.29	284
F2	Winter	24.65	26.00	0.00	40.00	9.90	310
	Summer	26.18	28.00	0.00	40.00	9.21	382
F3	Winter	25.75	27.00	0.00	40.00	9.75	227
	Summer	25.73	27.00	0.00	40.00	9.62	179
F4	Winter	21.84	22.00	0.00	40.00	10.56	534
	Summer	20.98	22.00	0.00	40.00	9.97	89
F5	Winter	14.67	17.00	5.00	22.00	8.74	3
	Summer	29.50	28.00	22.00	40.00	8.58	4

Table 8: Descriptive statistics for each treatment

	Df	F-value	P-value
Treatments	9	1.9749	0.038
	2246		

Table 9: Brown–Forsythe test for the homogeneity of variances

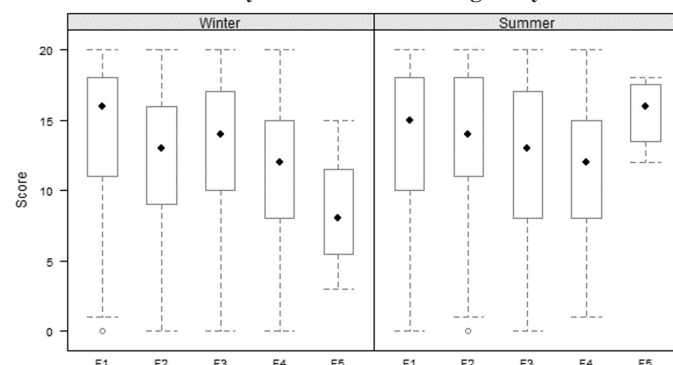


Figure 3: Boxplots for each treatment

Source of variation	Df	Sum of squares	Mean square	F-value	P-value
Intercept	1	3327.4	3327.4	2274.259	0.000
Faculty	4	36.0	9.0	6.155	0.000
Semester	1	4.7	4.7	3.184	0.074
Faculty*Semester	4	20.0	5.0	3.416	0.009
Errors	2246	3286.0	1.5		

Table 10: ANOVA table (Type III sum of squares)

Discussion

As the interaction effect in the analyses turned out to be significant, the main effects of faculty and semester were also retained in the models. One may conclude that there is difference among scores obtained by students of different faculties and these differences are not the same in each semester. Due to low p-values for faculty and interaction between faculty and semester, we may conclude that faculty is a factor that determines the score obtained from mathematics course.

Table 11 presents treatment means for sum of scores from both tests, mid-term test and final test. It can be observed that students from the Faculty of Finance and Accounting (F1) tend to obtain the highest scores each semester. However, students of this faculty tend to score slightly less in the second semester than in the first semester. These phenomena can also be observed for the mid-term and final tests. Students of the Faculty of International Relations (F2) tend score almost equally well as the students of Faculty of Finance and Accounting in the second semester. On the other hand, students of this faculty have much lower scores in the first semester. Students of the Faculty of Business Administration (F3) perform equally well in both semesters in both tests and students of Faculty of Informatics and Statistics (F4) obtain the lowest scores in both semesters. As mentioned above, students of Faculty of Economics do not take the course as compulsory one and it is hard to predict the reason why a particular student of this faculty takes the course.

We have to note that the differences between the scores obtained by students of different faculties may be caused by the fact that for enrolling to some programs, mainly at Faculty of Finance and Accounting and Faculty of Informatics and Statistics, students should exhibit some interest in mathematics prior to beginning of their bachelor studies as discussed in the previous paper (Otavová and Sýkorová, 2015). For this reason it would be interesting to include the score from entrance examinations into as independent variable into our model. Some authors have already analysed the relationship between entrance examinations and study performance. Klůfa (2015) shows that student's performance, i.e. score in mathematics in this case, is associated with the way how student was accepted to the university. Kučera, Svatošová, and Pelikán (2015) also conclude that student's performance can to some extent be predicted from results of entrance examinations.

	Semester	Faculty					Overall
		F1	F2	F3	F4	F5	
Both tests	Winter	42.39	36.95	38.92	33.16	23.33	36.73
	Summer	40.25	40.02	38.21	32.15	45.00	39.02
	Overall	41.24	38.65	38.61	33.02	35.71	37.68
Mid-term test	Winter	14.52	12.26	13.17	11.32	8.67	12.45
	Summer	13.78	13.85	12.49	11.17	15.50	13.32
	Overall	14.13	13.14	12.87	11.30	12.57	12.81
Final test	Winter	27.87	24.65	25.75	21.84	14.67	24.28
	Summer	26.47	26.18	25.73	20.98	29.50	25.70
	Overall	27.11	25.51	25.74	21.72	23.14	24.87

Table 11: Treatment means

Boháčková and Brožová (2012) concluded that there are differences between the scores obtained from students of different study programs. However, that study included students from one faculty. In this study students come different faculties. Similarly, Kaspříková (2012) discusses that students of different

study programmes score differently and she also concludes that students of Finance and Business obtain highest scores, while students of Informatics score low. Since these study programmes are offered by different faculties, we can conclude that our results coincide with her findings, as Finance programmes is offered by F1, Business programmes by F3 and Informatics by F4.

Motivation is one of the possibilities to reduce the differences among students of different faculties. Pacáková (2013) shows that allowing students to pass the course based on the mid-term tests might motivate students to study more. In our setting, the amount of points for the mid-term test could be increased, or more tests throughout the semester could be done in order to increase students' motivation to study throughout the semester. Another possibility, discussed by Brožová and Rydval (2014) is to increase the number of hours dedicated for the course and they show that scores and grades are worse when the number of hours are lower. Kolari, Savander-Ranne, and Viskari (2008) discuss various reasons why students are not motivated to study and why they study less hours than required. They focus on reasons such as student's background and different learning strategies and suggest that teachers should give advice on out-of-class learning strategies as well.

Conclusion

The scores of students were used to analyse the differences among different faculties. The differences observed for sum of the scores from mid-term test and final test remained when the scores from both tests were analysed separately. Hence, the students of different faculties perform differently in the mathematics course and these differences persist during the entire semester. As the faculty was shown to be a determinant of the score from mathematics in this study, a further discussion may be launched on what are the causes of these differences and the ways of reducing them.

In future research we would like to concentrate on long-term evolution of the scores, collect other information about the students, such as score from entrance examination, as covariates. Currently we are in process of collecting these data.

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MEDIA EDUCATION POLICY IN BULGARIA

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Highlights

- Media education is seen in its historical roots, legal policy framework and capacity-building
- The article presents a successful BA program at Sofia University, concerning media education
- Recommendations are made with respect to the future media literacy policies in Europe

Abstract

Media education is difficult to achieve as it is aimed at understanding and interpreting of the greatest concentration of sources and contents which are located in the media institutions. On the other hand, forming in two different and zealously protecting territory fields - pedagogy and media studies, media education is not yet positioned themselves in the relevant framework in almost all European countries. There are still no European or national mandatory requirements that would outlined its parameters in educational systems.

This article is an attempt to enter the historical roots and placing the problems that accompany media education in our country - legal policy framework; capacity-building; teacher training; materials and other relevant content; funding; educational institutions, etc.

Within the presentation of the condition of educational institutions in this area, the review study focuses on a successful Bulgarian experience in combining the two research directions with respect to media literacy - media studies and pedagogy at the biggest Sofia University "St. Kliment Ohridski".

Recommendations are made with respect to the future positioning of the relevant issues of media literacy policy in the European context.

Keywords

Media education, media literacy in Bulgaria, pedagogy of mass communication

Article type

Review study

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Introduction

Media literacy education is a relatively new trend in the Bulgarian educational system. It is based on an access to and participation in all media - traditional and new and involves obtaining skills for understanding of media content, as well as their interpretation and critical reflection in different contexts. Media literacy is a key prerequisite for active citizenship.

Media literacy is a matter of concern in many European and national official documents, but not yet with the imperative nature. All of the existing official European documents concerning media literacy are not in form of regalements, as we may see in Media Literacy Background Documents (2015)

This reviewed study reveals the state of the media entity in Bulgaria - historical background, legal policy framework, capacity building, role of actors etc. The article is part of project "European approach towards public competencies in digital environment in conditions of post modernity" in frame of International Academic Seminar on Media and Education in Philosophical Faculty, South-West University, carried out in 2014¹.

Historical background

In the 1960s and 70s in Bulgaria the need arose to establish a scientific discipline combining pedagogy and the media in response to the many problems arising from the growing influence of the media on people of different age groups. This discipline has developed under different names, such as media pedagogy, media literacy, media education, etc. Initially the preferred term in Bulgaria was "media pedagogy", but later on "media literacy" widely accepted. (Angelov, 2005; Zlateva, 2006)

The course on "Media Pedagogy" was first approved for the academic year 2003/2004 in the MA program on Public Communications within the framework of UNESCO's Department of Communication and PR at the Faculty of Journalism and Mass Communication, Sofia University St. Kliment Ohridski.

In 2007, at the Faculty of Pedagogy commenced an undergraduate program entitled „Pedagogy of Mass Communication and the Arts", comprising four years of training; a master program with the same name was also introduced. Three bachelor students have already graduated in this program. Training practice for the students is provided at bTV, the most popular Bulgarian TV channel, which has also employed several graduates of the master program.

¹ The project "European approach to public competencies in the digital environment in terms of postmodernity" was carried out in 2014 - 2015 under the leadership of Dobrinka Peicheva within the International Academic Seminar on Media and Education at the Department of Sociology, South-West University "Neofit Rilski"

An important step in the development and understanding of media education has been the Bologna process² (which began in 1999; that same year, Bulgaria signed the Bologna Declaration), under which the university system of Bulgaria has been coordinated with regard to other European countries. An important aspect of this is the need for active and creative use of the media by young people, who must be equipped with a critical approach to the media; diversity of viewpoints regarding local and regional identity should be promoted.

A milestone event with respect to the policies on developing media education was the accession of Bulgaria to the European Union. Adaptation of the Bulgarian education system to the standards of the European Union was an important element. An important part of the Bulgarian education system adaptation has been the formation of young people's skills in the competent and creative use of media and critical approach to media contents.

The actors in media education policies were mainly teachers and students involved in media literacy training – NGO representatives played a considerably smaller role. But nowadays teachers, students and representatives of NGOs have become the major agents. as a result of the adoption of the European recommendations³. The role of our National Parliament and its Committee on Media and Education is another important factor in the adoption and ratification of European official documents. Parliament's role in relation to the spread of the Internet among young people is particularly distinct. Discussions in this area are related to positive and negative sides of the Internet communications. In the "National Program of Information and Communication Technologies (ICT) in Schools" (2006) the Parliament has emphasized the need for providing media education for people of all ages and developing their skills for dealing with Internet and the new media. The role of the Ministry of Education and Science in the process of creating and disseminating documents relevant to these goals, including its acting as intermediary for the organization of numerous seminars, competitions, proposals, etc. in the field of media literacy is also very important. In response to the European reports and recommendations concerning media literacy and the European program 2020, a series of strategies, programs, plans, etc., have been designed and published by the government.

The main European and governmental projects, programs and technological initiatives related to media education and published in Bulgaria are: The National Strategy for Implementation of ICT in Bulgarian Schools(2005); The National Program of Information and Communication Technologies (ICT) in Schools (2006); The European Parliament resolution of 16 December 2008 on media literacy in the digital world - 2008/2120 (2008); The National Strategy for Lifelong Learning 2014-2020 (2014); The National Program Digital Bulgaria (2015), which

aims to define parameters (measures, responsible institutions, deadlines, budget) for the development of the information society in Bulgaria and to support the implementation of EU guidelines and tasks described in the digital agenda of Europe regarding the social and economic potential of information and communication technologies (ICT) and the Internet; The European Commission Recommendation on media literacy in the digital environment for a more competitive audiovisual and content industry and an inclusive knowledge society(2009); The European strategy for smart sustainable and inclusive growth "Europe 2020"(2014); The National Youth Strategy 2015 – 2020 (2013). However, none of the official documents of the Ministry of Education and Science contain specific references to the need for media and information literacy in educational structures. The European texts concerning the inclusion of media literacy in schools have not been taken into account – not even in the new draft education act. Article 77 (1) of the new Education Act (2015) encompasses some key components of media competences, including digital competence; social and civil competence; initiative and enterprise; cultural awareness and skills for creative expressions; ability for steady development supporting a healthy way of life, etc., but the Act does not link these components to media and information literacy.

The role of media literacy is clearly understood and emphasized mainly by researchers, who view media education as a mechanism for alleviating the problems of the educational system. Other major actors in media education are: NGOs, professional associations, and the family; it should be their mission to assist Bulgarian media education.

The most important agent in this respect should be the state, the legislative and executive sphere playing a decisive role in this connection. In order for Bulgaria to achieve its own conception for media education, the first task would be complying with the European recommendations. Moreover, target groups of today' media education are not only children and young people, but also older people and people with disabilities; this means there is a broad basis for expanding the scope of media literacy among the general public.

Information literacy, computer literacy and digital literacy are more popular in Bulgaria then media literacy (Marinov, 2013; Stefanova, 2013). We can say that these three terms have mainly been associated with media literacy by university teachers and NGO activists in this sphere.

We can also conclude that, while the initiatives of some universities and NGOs contribute to media literacy, there is yet no explicit agenda or active national strategy with respect to this goal.

Legal policy framework

There is no an official designation or legal definition of media education. The latter has been associated with digital culture, digital competence as components of media literacy. Most researchers, media workers, and NGO experts have adopted the European definition of media literacy as "the ability to access the media, to understand and to critically evaluate different aspects of the media and media contents, and to create communications in a variety of contexts", which has been validated by a large majority of the respondents to the public consultation and by the members of the Media Literacy Expert Group (2014). They have

2 The Bologna Process is a collective effort of public authorities, universities, teachers, and students, together with stakeholder associations, employers, quality assurance agencies, international organisations, and institutions, including the European Commission. The main focus is: the introduction of the three cycle system (bachelor/master/doctorate); strengthened quality assurance and easier recognition of qualifications and periods of study [Online], Available: http://ec.europa.eu/education/policy/higher-education/bologna-process_en.htm

3 <https://ec.europa.eu/digital-agenda/en/news/media-literacy-background-documents>; Recommendation2006/962/ECof the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning [Official Journal L 394 of 30.12.2006]. II. [Online], Available: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32009H0625>

seen media messages as “informational and creative contents in forms of texts, sounds and images carried by different forms of communication, including television, cinema, video, websites, radio, video games and virtual communities”.

From the researcher’s point of view media literacy includes all dimension of the European approach to media literacy in the digital environment (2007):

- “understanding all aspects of existing media - from newspapers to virtual communities;
- actively using media, through, *inter alia*, interactive television, use of Internet search engines or participation in virtual communities, and better exploitation of the potential of the media for entertainment, access to culture, intercultural dialogue, learning and daily-life applications (for instance, through libraries, podcasts);
- having a critical approach to media as regards both quality and accuracy of content (for example, being able to access information related to advertising in various media by using search engines intelligently);
- using media creatively, given that the evolution of media technologies and the increasing presence of the Internet as a distribution channel allow an ever growing number of Europeans to create and disseminate images, information and content;
- understanding the economy of media and the difference between pluralism and media ownership;
- being aware of copyright issues, which is essential for a „culture of legality“, especially among the younger generation in its double capacity of consumers and producers of content.

In such a framework, media literacy may be seen as an opportunity for young and old to develop their knowledge, values and a broad range of skills for critical thinking, communication and information management – skills that will make them reasonable users and creators. Therefore, it is an important and progressive strategy to foster thoughtful, engaged and informed citizens. The Bulgarian legal document referring to media literacy is the mentioned Act on pre-school and school education (2015), specifically its article 77 (1). But the mentioned Act contains no official designation of media literacy, and media education is not explicitly connected to resource allocation. Media literacy is only implicit in this new law. Nor does it designate a clear authority overseeing media education.

It would be reasonable for this to be a prerogative of the Ministry of Education and Science but no special resources are allocated in this respect. The legal documents - acts, recommendations, etc. – that serve as a framework for media education policies fail to reflect the issue of media literacy. (Dineva, 2012; Kirova, 2013) The new Education Act nowhere mentions that media literacy is one of the key competences for lifelong learning nor is any mention made about this in the Action Plan for the implementation of the National Strategy for Lifelong Learning (2009). The legal documents (laws, recommendations, etc.) which serve as a framework for media education policies fail to sufficiently reflect the EU recommendations regarding media literacy.

There are quite a number of documents that should be taken into consideration by Bulgarian media policy: The Grünwald Declaration on Media Education (1982); Recommendations

Addressed to UNESCO on Media Education (1999); The Paris Agenda, or 12 Recommendations for Media Education (2007); Opinion of the Committee of the Regions on „Media Literacy“ and „Creative Content Online“ (2008); Brussels declaration on Lifelong Media Education” (2010) etc.

We could say that the changing communications environment, the important role of the media in the education of young people, and the importance of the various forms in which media messages (such as programs, films, images, texts, sites) in everyday life can influence and change expectations with respect to the training and qualifications of teachers have not been taken into consideration and made sufficiently explicit. We should have in mind that, in this respect, target groups are all categories of people: children, youths, adults, elderly people, people with disabilities, etc.

There are informal links with other legal or social actors in the private and civil sector, which can deliver media education, but there is no explicit mechanism to facilitate interagency and inter-ministerial cooperation on this specific issue. There are no useful relations, discussions or dialogue going on with content editors and the program industries. Presentations, discussions and dialogue mainly take place between researchers (Marinov, 2013; Peicheva, 2014).

In the state educational requirements regarding the school disciplines of social studies and civil education (school education) the main focus is on the formation of the social culture of students and on developing their skills for active citizenship in society in terms of cultural diversity and globalization through building a critical approach to various media contents, creating communication and decision-making skills, promoting independent thinking and personal development.

Media education is the responsibility of various departments in the Ministry of Education, and there is no specialized department dealing with this specific area. Various departments in the Ministry (such as those of General Education, Vocational Education, Higher Education, Youth Activities) have media education as one of their priorities, insofar as it relates to the overall digital culture and digital education of young people. (Milenkova, 2011)

There is no Strategic Plan for Media Education for the use of school teachers. There are no laws stipulating the inclusion of media education in primary and secondary education. In terms of resources, though schools are technologically equipped to a satisfactory degree, there is no special curriculum on media literacy.

Capacity building:

Teacher training

Official government media policies on the role of teachers in the field of media literacy are lacking in our country – both with regard to their qualification and pre-qualification and to their role in student’s training at all educational levels. There are no specialized disciplines connected with media literacy in the official curricula for the 1st to 12th grade approved by the government. Training in information technologies is predominant – this discipline begins to be taught in 3rd grade, being elective until 4th grade, and then becomes mandatory

until 10th grade inclusively. The discipline primarily involves computer training of adolescents and is taught in all Bulgarian schools.

As mentioned, the most significant political program in the field of media education in recent years is the National Program for Information and Communication Technologies (ICT) in Schools, which is mainly focused on technology and Internet access. In Bulgaria media education, with a stress on media literacy, is mainly taught at universities. In schools media literacy problems are tackled more or less by the independent activities of lecturers, whose activity in this respect is linked to their participation in international programs and projects. (Sayanova, 2005)

The different forms and varieties of media training in our country are mainly positioned:

1. *Within university frameworks* - in bachelor, master and doctoral programs at different faculties and departments; at scientific centers, research seminars, laboratories, etc.;
2. *Within the sphere of non-government organizations*, as the subject of their constant work in organizing lecture courses, international seminars, discussions, etc.;
3. *In mobile "ad hoc" formations* connected with international or national projects more or less related to media literacy. These mobile formations have initiatives connected with the realization of project aims and tasks, but have no policies for implementing and continuing these activities and initiatives afterwards.

Training activities by these three types of actors have been and will continue to be realized in all educational grades (kindergarten/primary school/junior high/high school).

Within university frameworks: lecturers in accredited subjects connected with media education (journalism, public relations, media pedagogy, media impact etc.) are qualified in the respective profile. Their involvement with media education stems from their education and/or academic degree. Usually people dealing with media problems at universities and non-government organizations hold bachelor, master or PhD program in the field. For other lecturers - those working in areas outside media subjects, but with some relation to these - media education is also a part of their respective degree. Such are the lecturers on media topics teaching at departments of sociology, pedagogy, philosophy, cultural studies, library science, economics, etc.

Media disciplines taught or discussed in the different scientific educational units are predominantly connected with studies for the bachelor, master or PhD program and are primarily mandatory, not elective, specialized training courses. Usually the separate courses to media education contain 30 to 60 hours per year and represent predominantly mandatory disciplines.

The hours, types of programs, mandatory or elective characters of the disciplines related to media specialties or of separate courses related to media education are given in the Table 1.

University	Total hours	Com-pulsory	Optional	MA	BA
ULSIT	66745	54273	12472	13650	53095
SU+FJMC	27857	23832	4025	8945	18912
NBU	25710		25710	12750	12960
BFU	24750	18963	5787	13500	11250
SWU	6840	5381	1459	2380	4460
UNWE	3510	2370	140	555	2955
AUB	1076	666	410	--	1076
AMI	165	165		90	75
Total	158577	106698	50879	54870	103707

Table 1: Generalized information about media education at universities, 2014-2015

Legend: **ULSIT**- University of Library Studies and Information Technologies; **SU** - Sofia University "Kl. Ohridski"; **NBU** - New Bulgarian University; **BFU** - Burgas Free University; **SWU** – South-West University Neofit Rilski; **UNWE** - University of National and World Economy; **AUB** – American University in Bulgaria; **AMI** - Academy of Ministry of Interior

The data collected in Table 1 were collected by the authors and give an instant view of the situation at Bulgarian universities, but we do. We do not claim to be quite precise as there is no uniform national methodology for designing curricula or for the inclusion of the respective indicators.

The development of curricula in the field of media education is not connected with the regulations that are currently in force. Moreover, the development is not coordinated between the various lecturers and specialists working in the field. The absence of official media education policies reflects on the initiation and curricula contents of media education.

The accredited curriculums existing at the different universities are predominantly mandatory both in master and bachelor programs. The curriculums and programs in place are the results of lecturers' initiatives and are consistent with accreditation requirements and specific features of the other disciplines at the respective university. Accreditation of universities, professional orientations and programs is carried out by the governmental National Evaluation and Accreditation Agency (NEAA)⁴ The absence of official media education policies including requirements for a set of competences in media education is compensated by various competence indicators applied by individual lecturers, indicators that correspond to the general requirements of NEAA. Standard instruments for expected results are connected with the acquirement of skills for interpretations, analyses, co-creativity, independent presentations, etc. They are consistent with the specific characteristics of the different age groups and with the aspects of media literacy.

The basic results are connected with the knowledge of, for example:

- theories on the formation of media competence in different age groups - these theories take into consideration age group and multicultural environment particularities;
- positive practices in the activities of the European Union for the construction of a European cultural identity and

⁴ See: Bulgarian National Evaluation and Accreditation Agency. [Online], Available: <http://www.neaa.government.bg/en>

the realization of lifelong learning policies; the Bologna process for the construction of a uniform European higher education space;

- practices of application of multi-media for the needs of education;
- informing different age groups about currently important social problems of the democratic development of Bulgaria;
- variants of educating people so as to prepare them for active participation in social life;
- patterns of democratic citizenship and association. Key competencies have not been formally defined and included in media education.

Even in the published European Strategy for Lifelong Learning (2001), which lists key competences, there is no explicit key competence related to media literacy. The competences referred to are in the field of ICT. For EU countries, as it is well known, the following eight key competences have been defined in accordance with the Recommendation of the European Parliament and of the Council (2006)

- Communication in the mother tongue;
- Communication in foreign languages;
- Mathematical competence and basic knowledge in the natural sciences and technology;
- Digital competence (ICT);
- Learning skills;
- Social and civil competences;
- Initiative and entrepreneurial skills;
- Knowledge in the field of culture and creativity.

Higher specialized media education in the form of bachelor's, master's and PhD programs as well as individual disciplines and specializations in the fields of media, journalism or public relations in Bulgaria are available in major public and private universities, such as Sofia University, University of National and World Economy, New Bulgarian University, Southwest University, American University in Bulgaria, Burgas Free University, and others.

Sofia University, the largest and most prestigious Bulgarian university, uniquely offers a specialized bachelor program in media pedagogy at its Faculty of Preschool Education. The designation is "Pedagogy of Mass and Art Communication". (see Anex 1)

This pedagogical bachelor program in media literacy has been very successful. Its workload is 2205 hours and provides 240 credits; the duration of training is 8 semesters (4 years). Upon successful completion students receive a bachelor degree in Pedagogy of Mass and Art Communication. Students of this program can use their knowledge in various ways. One way is for students to demonstrate certain literacy products to kindergarten children – this enables students to check the children's responses and assessments. Some media products periodically prepared by the students include broadcasting, stream radio, children's magazine projects, documentary films, etc.

Some other media-related elements in universities involving research and training activities are centers, seminars, and associations. Some of the important ones are:

- The International Academic Seminar of Media and Education (SWU "N. Rilski");

- The Center for New Media and Digital Culture (SWU "N. Rilski");
- Southeast European Center for Semiotic Studies (NBU);
- Summer schools in various universities.

In the secondary education, media education is partially in teaching of foreign languages or Bulgarian language and literature in the higher grades. There are no specialized disciplines in this area. Some forms of specialization are available only in the training of Bulgarians school students living outside the country - USA, Spain, Germany, etc. No official national data are available regarding the teaching of media literacy in schools. Sporadic data may be found related to project activities of participants involved in media literacy projects. (Sayanova, 2005)

Within the sphere of non-government organizations.

NGOs are also involved in activities related to media literacy. This refers to various foundations and associations, some of which have long years of experience in organizing training courses, lectures, international seminars, discussions, etc. The most popular NGOs whose work is related to media education, for which they engage specialists, are the following: Easy Communication Association; The Media Development Center; Foundation Media with a Human Face; The Southeast European Media Center; Bulgarian Gender Research Foundation; AMI Communications Bulgaria; Media Democracy Foundation, etc.

The main areas of their activities can be summarized to:

- training courses in language skills for media;
- education and training for media professionals and journalism students in Bulgaria;
- professional training for journalists and media managers from Southeast Europe;
- training courses in language skills for media;
- support for the development of the free media market;
- development and implementation of media projects in Bulgaria and abroad;
- research, consultancy and information services on media and for the media;
- publication of media-related books and training materials;
- media promoting events; conferences, round-tables, discussions.

No statistical data are available for Bulgaria regarding the number of events held and the hours allocated to this activity. Such a statistical account cannot be made due to the absence of systematic data in the public domain and the unwillingness of some organizations to share data.

Mobile "ad hoc" education.

This forms a mixed nature. They include various categories of professionals - scientists, experts from NGOs, teachers, etc. Participation is usually along the lines of international and national projects; the groups are formed within the framework of the concrete projects and do not continue beyond the duration of the projects.

Unlike the other two forms, ad hoc participation is generally marked by insufficient long or short-term effectiveness of the implementation of activities (actually, this kind of inefficiency is

also typical for other project performance in the humanities and social sciences). One example of ad hoc education is the project “Media Education in Schools: Opportunities and Challenges 2007-2009”, conducted in the city of Razlog under international Comenius School Partnership.⁵ Another example is “On Air: European Project for Media Education”(2008) the Pestalozzi project, with respect to the participation of the Ministry of Education, which organized competitions for modular training seminars on media literacy and human rights during the period 2008 – 2010, etc.

Teaching/training materials and other relevant content

There are usually no teaching resources and materials made available under law or under official policies and the ones there are fail to address the issue of intellectual property. The few available materials are in the national language. The universities and their libraries, the training schools, centres, laboratories, seminars, etc., have been the significant research institutions and main support for media education. The NGOs and civil media centres have also played a role for creating teaching resources.

The majority of the available resources are copyrighted materials. They were created by teachers in universities and, to a much lesser extent, by people from non-governmental organizations and teachers in secondary education. The resources consist in published monographs, studies, manuals, including translations of books, articles from the European Union (manuals, statements, recommendations).

Materials in hard copies include lectures published in the printed media. The degree of their authenticity, similar to other author authenticities, is high in Bulgaria. Some of them are the results of specific project activities or of guided/mandatory activities. These resources have been selected and validated by official university committees, councils, boards. Some of them are disseminated among students in Bulgaria in the form of written texts prepared by teachers. Some available resources are usually created by the teachers themselves, and other resources are likewise usually selected by the teachers themselves.

The resources available are produced on the basis of specific projects. We have no official list of the most significant publications in the sphere of media education.

Funding

There is no official funding policy specifically for media literacy. Media education is situated in the framework of official education policies and their funding. The resources of media literacy are usually financed by university funds, by government science projects funds, by international project funds or EU funds, by different national funds, etc. Some projects are without funding, as are likewise some training programmes. There is no official information concerning funding. This issue usually lacks transparency. (Marinov, 2013; Peicheva, 2014)

Some resources of training programmes are funded by university funds, others by project funds. But most are without funding. It is difficult to say exactly what their proportion is in relation to the total education system revenues but it is certainly not

high. In general, the media education in state universities is funded mostly and mainly by the central government. In private universities it is funded mostly and mainly out of students' tuition fees. The financial reports of non-governmental organizations are available to the public via the Internet only in rare cases.

Role of actors (outside the school system)

Media education policies take into account partnerships outside the school system, but there are no media education policies for partnership outside the education system. Partnership is conducted on a basis that is usually defined in the design requirements for partnerships between researchers and business. (Dineva, 2012; Kirova, 2013)

A regulatory body for the media exists, called Council for Electronic Media, but this Council plays no role as regards the promotion of media education. The media authorities are not concerned with media literacy initiatives. They have appeared only on a power point presentation on “Protecting children from negative media content” - report prepared for the Council of Europe by Millwood Hargrave (2009). As for the private sector has been involved significantly in the conducting of training programmes and courses.

Some private universities offer media education in bachelor, master and PhD programmes and courses - The New Bulgarian University and the American University in Bulgaria. These universities have significant editorial capacity and available resources.

The role of civil society associations is not as visible as that of private universities. The former are involved in some European projects that include various kinds of media trainings and resources. Youth participation mostly consists in the participation of university students in the creation of media content and its presentation in various school units. The level of youth participation is not high. There is no grassroots community participation in media education.

In Bulgaria there are no specific professional organizations of media education teachers, librarians; learning centres professionals, or computer scientists. There are a few cases when parent associations and media/information professionals have collaborated in media education, but these were primarily on the basis of research projects, and were of low capacity.

We can cite many examples many examples of specific events – such as “press week”, festivals, competitions, games – that draw attention to the importance of media education. But there are no overlapping structures or events that try to bring together media literacy, information literacy and computer literacy. There are no online platforms or mechanisms.

Evaluation mechanisms (inside and outside school)

No media education policies exist to test media accountability as concerns the traditional media contributions or the public service media. Usually, this activity is carried out by researchers through research projects conducted by NGO staffs at universities, etc. There are no legal mechanisms to ensure and measure the efficiency of media education policies. Legal mechanisms are official institutions for measurement of media education official government ratings of universities and their specialties and mentioned above National Agency for Accreditation and

⁵ Project “Media Education in Schools: Opportunities and Challenges 2007-2009”, conducted in the city of Razlog under international Comenius School Partnerships, [Online]. Available: <http://pgtht-razlog.org/bg/european-projects/media-education.html>

Evaluation Media educational resources, programs and actors are evaluated in accordance with national indicators. There are additional mechanisms for evaluation, which are different for different universities.

Media education is predominantly targeted at the younger generation. No formal quantitative data about how many people to focus their efforts, and how many and what types of programs are available to targeted groups. There are quite a few media education programmes but yearly reports on them are prepared only in a few cases.

Main concepts and legitimizing values

All sorts of educational paradigms are put forward, including transmission, prevention, participation, but of these, participation is a more attractive educational paradigm for teachers and students. The main competences that are preferred and adopted are critical thinking, citizenship, creative interpretations and participation in processes.

There are many examples of positive impacts of media projects *on students and children* - one of them is connected with G. Tuleshkov, a student at the Sofia University BA program Pedagogy of Mass and Art Communication. His video clip: "My small civil contribution." won first place in a special national competition. The competition was organized by Human Resource Development Centre (2013)

Improvement, diversity, pluralism and critical thinking are the foremost values used to justify policies. The idea of empowerment is presented. Pluralism is a value that holds a significant place in the learning process in Bulgarian schools. Employment and inclusion are also major values referred to in the programmes. The question of human rights has also been invoked in many Bulgarian programmes. The hierarchy of values are used to justify actions, mechanisms and events outside formal and official policies and outside schools.

Conclusion and general appreciation

To give in brief our general view on the relevance of the media education policies in the national media system and in the national school system, we should say that they are not significant, efficient or relevant. (Milenkova, 2011; Popova, 2013; Stefanova, 2013; Peicheva, 2013) There are discrepancies between the legal framework and the actual performance of the actors inside and outside schools. The actual performance of the actors is better in quality than official government policies, which are not satisfactory. The unwillingness shown with regard to structural changes and new opportunities for improvement are due to lack of understanding, and underestimation of the importance of media literacy.

There is no clash between the state and the activities of self-regulating and co-regulating entities dealing with media education, but the activities of the Ministry of Education and Science are not adequate to the existing needs of these entities. The Bulgarian National Science Fund at the Ministry of Education and Science support a wide range of Bulgarian organizations, including commercial ones, NGOs, etc. But very often these organizations lack adequate scientific and general professional competencies. A drastic case was the failure of the Science Fund program for the year 2012-2013. In the last twenty years many NGOs in Bulgaria have been able to exist through projects. They win projects but lack the required professional

capacity and competency. Unfortunately this is also true of many projects in the field of media education and media literacy. As a result, there is a lack of awareness of the importance of media literacy, the media literacy results of teachers and students are inadequate, interest does not continue after the end of the project, and there is a lack of concern with regard to establishing official media education policies.

Future digital convergence may be a challenge for all these different actors to create new forms of cooperation and effectiveness. The successful meeting of this challenge will depend on our critical concern. The positive result might be the launching of new initiatives for media literacy and legislation relative to it. Bulgarian universities are the places for realizing effective media literacy and education.

Recommendations for better positioning of media literacy in EU countries

1. Media literacy should be a subject taught within the framework of compulsory education;
2. Media literacy should be taught as part of the primary school education.
3. Media literacy training should focus on teachers, professionals and students.
4. Many European countries need to have a special EU directive for including media literacy in their national education legislation and curriculums (one such country is Bulgaria).
5. For better positioning of the national media literacy policies it would be good:
 - to be established a European network of media literacy training institutions;
 - to set up an EU Information Centre and network responsible solely for project support in the field of media literacy;
 - to enhance the professional and qualification criteria for participation in media literacy projects at European level.

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Appendix 1 CURRICULUM *Pedagogy of Mass and Artistic Communication*

										
SOFIA UNIVERSITY "ST. KLIMENT OHRIDSKI"										
FACULTY OF PRESCHOOL AND PRIMARY SCHOOL EDUCATION										
CURRICULUM										
Signed by:	Approved by the academic council, Record of Proceedings № /									
Professional Field: PEDAGOGY										
Educational and Qualification Degree: BACHELOR										
Subject Area:										
<table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <tr> <td style="width: 10%;">N</td> <td style="width: 10%;">P</td> <td style="width: 10%;">M</td> <td style="width: 10%;">1</td> <td style="width: 10%;">4</td> <td style="width: 10%;">0</td> <td style="width: 10%;">1</td> <td style="width: 10%;">1</td> <td style="width: 10%;">4</td> </tr> </table>		N	P	M	1	4	0	1	1	4
N	P	M	1	4	0	1	1	4		
<i>Pedagogy of Mass and Artistic Communication</i>										
Form of Study: Full-time										
Length of Study: 8 semesters										
Professional Qualification: Bachelor of Arts in Pedagogy of Mass and Artistic Communication, pedagogue, media expert, foreign language teacher										

Qualification Description

Subject Area: Pedagogy of Mass and Artistic Communication

BA Program/ MA Program: BA Program

Educational objectives:

The range of knowledge, skills, attitudes and professional competences are defined in the National Qualifications Framework of the Republic of Bulgaria, adopted by the Council of Ministers in Resolution № 96 of 02.02.2012.

Due to the development of civil society in Bulgaria in the beginning of the 21st century, it is important that there are well prepared and qualified teachers who are able to efficiently work in the field of media pedagogy and artistic communication. Such teachers could cultivate and facilitate the formation of information and media literacy in children. The course in "Pedagogy of Mass and Artistic Communication" comes as an answer to the growing need for teachers' participation in the design and implementation of various artistic and mass communication projects (including websites), intended for children. It is a topical and interdisciplinary course which incorporates knowledge in pedagogy, media studies and art. The overall aim is to train specialists who are able to provide and successfully maintain a link between education, art and the mass media.

Description

The academic goal of the course in "Pedagogy of Mass and Artistic Communication" is that students acquire thorough and comprehensive knowledge in pedagogy (theory, history, methodology and contemporary issues of pedagogy) as well as in communication and its characteristic features in different cultural settings, human interaction and mass media.

Students are expected to develop skills for diagnostics and professional consultations, counseling and advice on topical issues related to the organization and governance of education. They should be able to apply these skills in their practice by adopting the educational tools of pedagogy, cultural and media studies. The practical course in the foreign language aims at developing students' language skills. At the end of the course students should achieve a high level of confidence as users of the foreign language. They should also acquire theoretical knowledge and understanding of the existing foreign language teaching methods, approaches, principles and techniques and be able to successfully apply them when teaching children in various pre-school and primary school settings.

Professional Qualifications

The professional skills/competences of the students on this course are designed to match the ones, designated in the First cycle (Bachelor's level) of the Qualification Framework of the European Area for Higher Education and in the National Qualifications Framework, sublevel 6. Students should develop an array of knowledge, skills and competences which would enable them to competently look into, analyze and tackle issues and solve problems related to children's upbringing and education in the current context of our information society and mass and artistic communication.

Professional Realization

The specialized training and education of the students in "Pedagogy of Mass and Artistic Communication" enhances their chances for professional attainment and employment as pedagogical experts in different media and cultural institutions.

The students who have successfully completed the Bachelor of Arts in "Pedagogy of Mass and Artistic Communication" course can:

- in general, occupy eligible job positions in children departments at the institutions of mass and artistic communication;
- work as specialists-pedagogues in the media (including web-based media), competent in matters of upbringing and education;
- work as specialists-pedagogues in cultural institutions (institutions related to literature, folklore, music, theatre, fine arts, etc);
- work as specialists in marketing and management of mass and artistic communication in educational institutions;
- work as specialists-pedagogues in the departments of Public Relations;
- work as teachers of media studies, media pedagogy, media didactics and artistic communication in high school;
- work as foreign language teachers of preschool and primary school children;
- work as consulting experts in cultural and mass communication institutions which deal with children;
- work as supervisors and teachers in cultural and media centers for children and groups for extracurricular activities;
- work as consulting experts in agencies and centers for pedagogical and educational research and prognoses;
- hold administrative management positions;
- hold scientific and assistant positions.

SELF-REFLECTION OF STUDENTS OF ECONOMIC TEACHING AND THEIR PERSONAL CONSTRUCT OF EXPERT-TEACHER

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Highlights

- Students referred more about their strengths than about their weaknesses
- Personality, Social skills and Will were the most frequent categories
- Future teachers' construct of a good teacher affects their self-reflection as a teacher
- Self-reflective essay is useful method for development of auto-diagnostic skills

Abstract

To be efficient and satisfied in his/her profession, a teacher needs to realize adequately his/her strengths and weaknesses. To support development of self-reflective skills by future teachers, students at Department of Economic Teaching Methodology at University of Economics in Prague were asked to write an essay called 'Why am I supposed to be a good teacher?'

Content analysis of self-reflective statements and participants' personal construct of expert teacher bring important feedback information about skills that should be trained during the education of prospective teachers. Participants consider the self-reflective essay as enriching method that helped them to realize their strengths and weaknesses and to develop their self-reflective skills as an important part of professional expertise.

Keywords

Personal construct, personality of prospective teacher, self-reflection, social skills, teachers' education

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Full research paper

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Introduction

In a context of escalating requirements on a teacher's personality, many attempts to classify professional skills of a teacher appeared (Sternberg, Horvath, 1995; Kyriacou, 1998; Gillernová, 2008). Kyriacou (1998) created categorization of teacher's essential skills consisting of seven areas: planning and preparation, lesson presentation, lesson management, establishing a positive classroom climate, discipline, assessing pupils' progress, reflection and evaluation). Sternberg and Horvath (1995) described an 'expert-teacher' by declaring a prototype that consists of three characteristics: knowledge base, efficiency (involving executive control) and insight. Gillernová (2008) defined four areas of professional skills of a teacher: theoretical skills (connected with the subject he/she is teaching), didactic skills, diagnostic skills and social skills. Despite their differences, all these models of professional skills of a teacher have some common features. One of them is the emphasis on auto-diagnostic skills and self-reflection.

The self-reflection or auto-diagnostic skills could be defined as the teachers' ability to understand their personalities, recognize their weaknesses as well as strengths that help them to develop high level of self-awareness (Zeren, 2012). Moreover, 'teachers with a high degree of self-awareness are expected to be more understanding towards their students because understanding others requires one to understand herself first' (Zeren, 2012: 2445). Švarcová (2010) defined the self-reflection ability as a crucial part of social intelligence: 'The social intelligence might be divided into two types: interpersonal intelligence, which means the ability to act with others, to perceive the needs of others, to emphasize easily with others, and intrapersonal intelligence, which refers to the self-reflective capacities, understanding of the self and own behavior and the skill to take

control of it' (Švarcová, 2010: 41). The ability of self-reflection is strongly connected with self-perception (Hayes, 1993) and with the level of self-efficacy (Bandura, 1977: 194): 'Efficacy expectations determine how much effort people will expend and how long they will persist in the face of obstacles and aversive experiences. The stronger the perceived self-efficacy, the more active the efforts.'

There is a growing tendency to teach teachers how they should help their students to reflect themselves (e.g. Freddano, Siri, 2012; Körpülü, 2012). 'Culture of evaluation among schools and self-evaluation within schools are gradually developing with the scholastic autonomy system' (Freddano, Siri, 2012: 1142). Apart from that, many studies focus on enrichment of teachers' abilities to observe and regulate their own teaching styles, communication styles and other forms of behavior. Some of the studies deal with prospective teachers, incorporating the self-reflection into their pre-gradual preparation (Mogonea, Mogonea, 2013; Majzub, 2013; Zeren, 2012).

Mogonea and Mogonea (2013) used the psycho-pedagogical experiment with prospective teachers using self-correction or mutual correction, controlled self-grading, mutual grading, objective inter-assessment method (Mogonea, Mogonea, 2013: 533). They found out that frequent use of self-evaluative method and the usage of metacognitive skills lead to significant progress in self-assessment abilities in the experimental group. Authors confirmed their hypothesis that developing of metacognitive skills has positive effect on the process of self-reflection.

Majzub (2013) used qualitative analysis of narratives that students wrote during their teaching practicum at schools.

Author concluded that the self-reflective reports during teaching practicum had positive impact on future teacher's awareness of their learning and teaching skills and ability to manage issues and problems relate to their teaching expertise.

The study of Zeren (2012) focused on the characteristics of students' personalities in term of Piaget's cognitive development theory, Freud's psycho-sexual development theory, Ericson's psycho-social development theory (Zeren, 2012: 2448-2449). Participants should write a personal story about chosen theory connected with his/her life-span.

In our study, not only the self-reflection processes of student teachers were observed, but also their personal construct of expert teacher. Our findings are grounded in personal construct theory. According to its author George Kelly, personal constructs 'refer to thoughts, feelings, intentions etc. that a person is not necessarily aware of. His theory concerns the manner in which personal convictions guide the thinking and actions of people. He advances the idea that, behind the judgment and behavior of a person, an individual theory is hidden.' (Touw, Meijer, Wubbels, 2015:2)

Kelly supposed that people do not behave in correspondence with real characteristics of real world, but on the basis of their personal beliefs about this world. People act as scientists, having their individual categorization system of experiences with the world that leads to their personal constructs about their world. 'It is, then, a theory of man's personal inquiry—a psychology of human quest' (Kelly, 2005: 3).

Although personal constructs have individual nature, people are interested in constructs of others and they can modify their constructs under influence of interactions with others (or after some other important experiences) (Plháková, 2006: 262). Personal construct system is often observed in contrasts, by repertory gird technique. 'According to Kelly, an individual personal construct system consists of double entities or 'contrast poles'. Their meanings can only be established in contrast to the other 'pole', for example, brave–afraid, brave–anxious or brave–quit. These examples of constructs do not illustrate the concept brave, but rather a bipolar formation: brave versus another pole. The contrast gives meaning to the content of both poles of the construct.' (Touw, Meijer, Wubbels, 2015:2). As in some another studies (eg. Nasri et al., 2011), repertory gird technique is not used in our study, because observing of personal constructs is a 'secondary product' of content analysis of self-reflective essays, so student teachers' constructs of expert teacher are taken as a set of their statements about good teachers in their essays.

The theory of personal constructs was implemented in the area of teachers' professional development e.g. by Nasri et al. (2011). The authors result from the fact that there are many studies dealing with students' personal beliefs and their connection to learning approaches and outcomes, but much less studies about teachers' epistemological beliefs and their connection to teaching practices. They created a set of questionnaires to identify personal constructs by novice and expert Science teachers to observe similarities and differences. 'The understanding of these problems is deemed crucial because teachers' beliefs on their function will be reflected on their action that is teaching approaches used and goals of teaching' (Nasri et al., 2011: 2825).

The study focused on two main constructs: personal characteristics and teaching strategies. In the first construct, both groups (novices and experts) assigned as important for Science teacher these characteristics and elements of behavior: being fair, having positive attitude, using humor in class, creative in delivering lesson, willing to admit offence, have high expectation on each student, not to be strict and arrogant. By second construct (teaching strategies), expert teachers stressed importance of creating active teaching and learning, using flexible teaching strategies that suit each student's learning style and relating each lesson content to daily life activity, whereas novice teacher emphasized only importance of having in-depth knowledge in Science and latest Science pedagogical skills. This difference is probably caused by the fact that novice teachers are not comfortable in dealing with unstructured teaching style (Nasri et al., 2011: 2826). Authors concluded that 'identifying science teacher personal construct, Science teacher will be more aware of how their thinking affects behavior and most importantly their teaching mode' (Nasri et al., 2011: 2826).

The study of Touw, Meijer and Wubbels (2015) focused on identification of student teachers' perceptions about their pupils in special schools and on creating of a method to categorize these constructs. The aim of the study is to investigate beliefs that student teachers create about their pupils and that may significantly influence their expectations from these pupils, their relationships and interactions with them (Touw, Meijer, Wubbels, 2015:1). The authors try to understand development of teachers' construct about their pupils. A functional goal of this study is 'to improve the guidance during their teacher education. This is especially useful for articulating constructs that were previously unarticulated. The primary aim of this study is to develop and describe a coding system for these beliefs' (Touw, Meijer, Wubbels, 2015:2).

On the basis of their research findings, the authors created a Classification System for Teachers' Personal Constructs (CSTPC), including following categories: attitudinal, emotional, relational, personal, intellectual, interests and physical (Touw, Meijer, Wubbels, 2015:6). Student teachers from the research sample most used constructs that were categorized as Attitudinal. These constructs refer to the meaningful, valuable and characteristic aspects teachers notice about their pupils when they think and act. The second most frequently occurring category is Relational (constructs about the social functioning of pupils and pupils' relationships with others). The third most frequently mentioned category was Emotional (constructs about a pupils' emotional and psychological functioning). The fourth category was Personal, relating to pupils' actions and the way they perform them. The constructs in this category describe the individuality of a person. It is remarkable that category Intellectuall that could be quite crucial for education (constructs about intellectual functioning and school achievement; about learning performance: the learning progress and performance in academic subjects) was only the fifth frequently mentioned category. (Touw, Meijer, Wubbels, 2015:6-8)

Although this study differs from our research that focuses more on future teachers' personal constructs of expert teacher than on constructs of pupils, findings of Touw, Meijer and Wubbels brings important information about self-reflection of teachers' attitudes and relationships with their pupils or students. 'Since the extent to which someone has positive or negative expectations of another person may have far-reaching implications for

their relations with that person (Pajares, 1992), understanding teachers' constructs about their pupils is an important topic of research' (Touw, Meijer, Wubbels, 2015:1).

Zeren (2012) worked on the assumption that 'in terms of professional development, teachers' ability to understand themselves and to have awareness about their inner selves may affect their attitudes and behaviors towards their students' (Zeren, 2012: 2445). This assumption is crucial also for our pilot study dealing with ability of students to realize their personal characteristic and abilities helping them to manage their future profession. The goal of the study is to identify which characteristics students used to describe their predispositions to become a teacher, to categorize them according to their positive or negative denotation and to assign these expressions to fundamental psychic processes and structures. Self-reflective statements are observed in connection with participant s' personal construct of expert teacher. These findings will be used as groundwork for future research with more quantitative orientation and as a feedback for the education of Educational Psychology at Department of Economic Teaching Methodology at University of Economics, Prague.

The orientation of our pilot study is idiographic and reflects a hermeneutic-narrative tradition of a research (Miovský, 2006). The significance of quantitative results will be verified by future research.

Materials and Methods

The content analysis method (Disman, 2011) was applied on essays of students who were asked to write an essay called 'Why am I supposed to be a good teacher' as a part of their assessment in a course of Educational Psychology. They were told to summarize their characteristic that would help them to manage the profession of a teacher. In correspondence with theory of positive psychology (Seligman, 2004), the students should describe positive characteristic. They could mention their negative characteristics as well, but they should suggest some possibilities how to improve themselves in those areas (some kind of intervention, time-management, relaxation etc.).

A sample size was 60 students of a master degree program (45 women and 15 men), 33 students participated in the first phase of research, 27 in the second phase. A desiderative length of the essay was two standard pages and students had approximately three months for writing this essay.

In collected essays, all expressions describing self-reflective characteristics were identified and divided into categories according to their relation to fundamental psychic processes and structures. Each category had two dimensions, reflecting positive or negative denotation of expressions (strengths or weaknesses).

The research was implemented during one academic year with two groups of students (winter and summer semester). The first phase of the research focused entirely on the self-reflective statements and their categorization. It was the first research probe focused on the mapping of the students' self reflective processes (Krejčová, 2015). The aim of the second phase was to validate and enlarge our findings from the first phase. Moreover, an interpretation of a 'good teacher' or expert-teacher was observed. Our intention was to find out which skills and personal traits of a teacher are considered as important for the participants

of this research, because this construct could significantly affect their self-reflection in role of a teacher.

Results and Discussion

During the content analysis of the first group of essays (33 participants), 308 self-reflective statements were identified and divided into 11 categories according to their relation to fundamental psychic processes or structures (see Table 1). Moreover, two dimensions were distinguished: strengths (the expression was used in some positive context) and weaknesses (the expression was used in some negative context). Some expressions (e.g. 'perfectionism') were designated as strength in one essay and as weakness in another. One student described 'responsibility' as her strength and weakness simultaneously, so it was counted twice in both strength and weaknesses.

Category	Strengths	Weaknesses
Creativity	12	2
Emotions	17	12
Motivation	34	3
Organization	10	3
Personality	43	23
Presentation	6	7
Self-confidence	2	12
Social skills	37	20
Stress	7	8
Volition	29	15
Others	3	3
Total	200	108

Tab. 1: Categorization of self-reflective statements in first phase

Compared with described models of professional skills of a teacher (Gillernová, 2008, Kyriacou, 1998), students described much more social skills than theoretic or didactic skills. This fact can be interpreted in connection with the content of course of Educational Psychology that is orientated more on social and diagnostic skills than on theoretic and didactic skills trained in other courses.

Students referred more about their strengths than about their weaknesses. The only areas where weaknesses predominated were Self-confidence, Stress and Presentation. Some expressions were used in more essays. The most frequent expressions from strengths were 'empathy' (described by 14 students, i.e. almost half of participants) and 'active listening' (described by 11 students). This fact might be also related to the course of Educational Psychology in which both these skills were trained. The most frequent expression from weaknesses was 'conflict avoidance' (described by 8 students).

To clarify the process of content analysis, more frequent expressions from some categories is described. All three expressions mentioned above (empathy, active listening and conflict avoidance) were assigned to category of Social skills. In Emotions, more students mentioned 'extrovert' and 'well-balanced' as strengths and 'nervous' and 'impulsive' as weaknesses. In Motivation, most frequent strengths were 'I enjoy transferring knowledge', 'I can motivate other people'. In Characteristics of Personality, more students described themselves as 'friendly' and 'rightful' in strengths and as 'perfectionistic' and 'stubborn' in weaknesses. In Volition, the most frequent strengths were 'precise' and 'patient', the

most frequent weaknesses were ‘impatience’ and ‘tendency to procrastination’.

In the next research phase with second group of respondents (27 students), 284 self-reflective statements were identified (see Table 2). Almost the same categorization as in the first phase was used with one exception, one category summarizing statements about development of students’ thinking processes and strategies was added (such as ‘understanding to student’s way of thinking’, ‘to analyse information in a logical structure and to transmit it clearly and easily’). In a dimension of strengths and weaknesses, participants in a second phase used 243 positive and 41 negative expressions.

Category	Strengths	Weaknesses
Creativity	7	1
Emotions	21	2
Motivation	31	1
Organization	3	1
Personality	59	4
Presentation	13	5
Self-confidence	1	2
Social skills	48	5
Stress	2	7
Volition	40	9
Thinking	7	0
Others	11	4
Total	243	41

Tab. 2: Categorization of self-reflective statements in second phase

As in the first phase, students referred more about their strengths than about their weaknesses. Weaknesses predominated only in Self-confidence and Stress. The most frequent expression from strengths was ‘empathy’ again, described by 11 students. Next frequent expressions were ‘patience’ (10 students) and ‘rightfulness’ (8 students). Responses in weaknesses were quite variable, only ‘impatience’, ‘unpunctuality’ and ‘anxiety from bigger audience’ were marked twice.

Category	Strengths	Weaknesses
Creativity	19	3
Emotions	38	14
Motivation	65	4
Organization	13	4
Personality	102	27
Presentation	19	12
Self-confidence	3	14
Social skills	85	25
Stress	9	15
Volition	69	24
Thinking	7	0
Others	14	7
Total	443	149

Tab. 3: Categorization of self-reflective statements in both phases

In Table 3, findings from both research phases are summarized. Some findings from this summarization are quite obvious, because data from both phases have this tendency: students referred much more frequently about their strengths (443 statements) than about their weaknesses (149 statements); the

only areas where weaknesses predominated are Self-confidence and Stress. These findings deserve further exploration, but might be partially explained by the fact that students handed their essays before the last lesson that focused on stress and its prevention. Lower self-confidence might be caused by the lack of experiences in the teacher’s role.

Remarkable are the largest categories: in the first phase, the largest categories in strengths were Personality, Social skills and Motivation and in weaknesses Personality, Social skills and Will. In the second phase, the largest categories in strengths were Personality, Social skills and Will and in weaknesses Will, Stress, Presentation and Social skills. When all the statements in table 3 were summarized, the largest categories in both strengths and weaknesses are Personality, Social skills and Will. It means that in bigger sample of respondents, these three categories are the most frequent (and thereby probably most important) in self-reflections of student teachers from our research sample. Next remarkable finding is that in both research phases was identical most frequent expression: ‘empathy’. This social skill seems to be crucial for the self-reflection of future teachers in our sample, which is probably influenced by the content of course of Educational psychology.

To investigate a construct of ‘expert teacher’ in participants’ essays, the content analysis method was used as well. Although the definition of ‘good teacher’ was not obligatory nor suggested part of essay, majority of students (18 from 27) mentioned some definition or partial characteristics of a good teacher. In analysis of these texts, 65 statements were found. The most frequent expressions were ‘rightful’ and ‘interested in his/her subject, enthusiastic’ (5 respondents by each statement). Next frequent expressions were ‘respect, authority’ (4 respondents); ‘good relationship with students’, ‘communication skills’ ‘honest’ and ‘creative’ (3 respondents by each statement); ‘understanding’, ‘self-improvement’, ‘motivating’, ‘is able to admit a mistake’, ‘understands his/her subject and can explain’, ‘decisive’ and ‘friendly’ (2 respondents by each statement). Other expressions were mentioned only once (respectively by one participant), but they are also part of personal construct of good teacher in our study: ‘holder of moral values, presentation skills, not rush and impetuous, punctual, honest, can teach a lot, purposeful, organization and didactic skills, partner, entertaining, amusing, unconflicting, calm, able to commend and to restrict personal needs’ (restricting of personal needs as a characteristic of good teacher is very disputable because of psychohygienical reasons, but it is serious part of students’ statements).

The most frequent expression from this part of research (‘rightful’) is also one of the most frequent expressions from the self-reflections in second phase. Like in self-reflective statements, participants mentioned mainly personal traits and social skills in their definitions of good teacher. These findings supports the assumption that future teachers’ construct of a good teacher affects their self-reflection as a teacher.

To verify and enrich our findings, a follow-up quantitative research using some methods of text mining would be appropriate (e.g. Manning, Schütze, 1999). Despite small sample size, results are highly relevant for the course of Educational Psychology and other education and training in the Department of Economic Teaching Methodology at University of Economics, Prague. Because majority of students wrote the essays at the end of the semester, some effect of the content

of the course can be presumed. The most frequented positive expressions in the first phase were 'active listening' and 'empathy'. Both these abilities were repeatedly mentioned and trained in the course. Conversely, less space was given to ability of successful solutions of conflict and 'conflict avoidance' was the most frequent expression from weaknesses in the first phase. Some training of effective solution of conflicts and assertiveness in course of Educational Psychology would be probably helpful also for students' self-confidence that was the one of categories in that negative expressions markedly predominated.

Although students seemed surprised by the fact that they should reflect themselves in the essay and worried if they were able to manage this type of assignment, finally they found the self-reflection very useful and enriching:

- 'This essay was a great opportunity to try to reflect myself, to sum up my abilities, weaknesses and predispositions to be a teacher. It also helped me to realize my motivation to work as a teacher.'
- 'At first, I took this essay only as an obligation that helped me to gain points. However, I realized the acquisition for my personality. I was thinking about myself, what kind of person I am and what I can improve.'
- 'At first, I asked: How can I know if I am supposed to be a teacher? I have no experience with teaching. Simultaneously, I was pleasantly surprised by this task and by the fact that we (students at university) are finally forced to think, not only to memorize and to re-write textbooks.'
- 'It would be useful to write such self-reflection after ten years and to repeat it in ten-years periods.'
- 'I learned from this essay a lot, e.g. that it is important to appreciate not only the others, but myself as well. I considered deeply about my motivation to be a high-school teacher. (...) I found out that I need to use my strengths in all challenges in my life so I can overcome the obstacles better. It would be useful for each man to try this self-reflection.'

Our findings were compared with the article of Arif et al. (2012). They measured the Big five personality traits of future teachers at teacher education institutes of Punjab, Pakistan. They found that 'the ratio of four personality traits (Extraversion, Agreeableness, Conscientiousness, and Neuroticism) was nearly the same, but the ratio of Openness personality trait is greater which means that the openness personality trait of prospective teachers is more dominant as compared to remaining four big personality traits' (Arif, et al., 2012: 161).

Despite the research has different methodology and terminology from our study, some findings can be concluded. In the study of Arif et al. (2012), Openness (characterized as 'curious, intellectual, creative, cultured, artistic, sensitive, flexible imaginative' (Arif et al., 2012: 163) overwhelmed. In our study, much less expressions were identified in category Creativity (that could be close to Openness) than in Social skills. The category of Social skills (empathy, active listening etc.) could be related to Agreeableness from the Big Five, characterized as 'Co-operative, warm caring, good-natured, Courteous trusting' (Arif et al., 2012: 163). Moreover, the ratio of Agreeableness was not higher than ratio of Extraversion, Conscientiousness, and Neuroticism and was lower than ratio of Openness.

This difference from our study could be explained by a fact that in research of Arif et al. (2012), Agreeableness was significantly higher in women than in men. Both studies have different gender-proportion: 45 women to 15 men in our research and 60 women to 40 men in the study of Arif et al. (2012). Consequently, difference in our results could be caused by different gender proportion. Therefore, it would be interesting to study gender differences in self-reflective essays in our future research.

As Majzub (2013), our study concluded that the self-reflective reports during teaching practicum had positive impact on awareness of students' learning and teaching skills. Some future research during training teaching of the participants of our research could study impact of self-reflection skills on the ability to manage issues and problems related to their teaching expertise.

In research of Zeren (2012) students should write some personal stories within a framework of classical theories in developmental psychology. Participants stated that this task positively influenced their self-awareness and understanding towards children and youngsters (Zeren, 2012: 2445). Our study was concentrated more on explicit naming and describing of strengths and weaknesses in relation to profession of a teacher. Because of a strong connection between speech and mind (Vygotskij, 1986), this type of task should help students to think more efficiently about themselves in the role of a teacher.

The study of Nasri et al. (2011) focused on constructs of personal characteristics and teaching strategies by novices and expert teachers. Novices teachers seemed to be uncomfortable with unstructured teaching style, neglecting didactic skills like creating active teaching and learning, using flexible teaching strategies and relating each lesson content to daily life activity. Unlike in our study, teacher novices relied more on in-depth knowledge in Science and latest Science pedagogical skills (Nasri et al., 2011: 2826). In contrast, future teachers in our study perceived importance of creativity, flexibility and transcendence in teaching strategies describing good teacher like 'interested in his/her subject, enthusiastic' (5 respondents); 'creative' (3 respondents); 'self-improvement', 'motivating' 'understands his/her subject and can explain', (2 respondents). These findings can be supported with fragments of analysis of self-reflective essays:

- 'It is important for a teacher to think creatively and to use entertaining methods of teaching.'
- 'Preparing for my teaching I tried to be creative and originative, because I consider creativity as one of basis characteristics of a good teacher.'
- 'I would like to conclude my essay by motto of Ch. F. Browne: 'The average teacher tells. The good teacher explains. The great teacher demonstrates. The best teacher inspires.'

Conclusion

Our study proved that a self-reflective essay can significantly enrich the preparation of future teachers, helping them to realize their strengths and weaknesses and to develop their professional expertise. The students appreciated this type of task as an opportunity to think about themselves and their pedagogical skills, personal characteristic and dispositions related to profession of a teacher. Despite small sample size, results of content analysis are highly relevant as a source of information

about the self-awareness of students and as a feedback for the course of Educational Psychology that could positively influence its effectiveness.

This pilot study will be followed by a quantitative research with larger samples, using methods of data mining and factor analysis to bring significant and detailed findings about personality of students. The study will compare differences in responses of men and women and differences between the essays from Educational Psychology and self-reflections that students write later (during their training teaching at secondary schools) to analyze development of students' responses after confrontation with real practice.

Other following study should investigate personal constructs of expert teacher more deeply than in present study, using the repertory grid technique to improve reliability of our findings. An analysis of student teachers' personal constructs of pupils (or students) with help of Classification System for Teachers' Personal Constructs (CSTPC) by Touw, Meijer, Wubbels (2015) could be enriching for development of positive attitudes and relationships between teachers and their students not only during their training education, but in their future profession as well.

Such studies could importantly enrich the education and personal training of students in Department of Economic Teaching Methodology at University of Economics, Prague and could be exploitable for other institutions dealing with teachers' education and personal growth.

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ENGLISH FOREIGN LANGUAGE (EFL) INSTRUCTORS' AND TEACHERS' PERCEPTIONS TOWARDS THE INTEGRATION OF INTERNET-ASSISTED LANGUAGE TEACHING (IALT) INTO EFL INSTRUCTION

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Highlights

- Both instructors and teachers showed positive attitude towards IALT
- EFL instructors seem to have more confidence in applying computer technology in their classroom
- EFL teachers perceived managing internet use, technical problems, and internet illiteracy

Abstract

Although internet-assisted language teaching (IALT) has been recognised by the rapid progress of internet, there is a lack of published studies concerning the perceptions and perspectives of English Foreign Language (EFL) teachers on the integration of the internet into language learning and teaching. This study compares the differences between EFL university instructors' perceptions and state and private school EFL teachers' perceptions, towards the integration of internet-assisted language teaching (IALT) into EFL instruction. 82 participants took part in the survey and responded to the questions about their perceptions towards integrating internet-assisted language learning into EFL instruction, what types of internet resources they use to enhance language learning, and what kind of barriers prevent the use of the internet in EFL classes. A mixed-method approach, quantitative and qualitative, was administered in this study. The quantitative part of the research is a questionnaire with two sections, and the qualitative part is an open-ended questionnaire. Both quantitative and qualitative results demonstrate that although both instructors and teachers showed positive attitude towards IALT, the internet activities they used in the classroom were limited, and there were some barriers against internet use in the language classroom, such as limited time, limited computer facilities and certain technical problems.

Article type

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Introduction

With the improvement of the Internet, internet-assisted language learning (IALT) has been progressively more integrated into educational settings to engage learners in meaningful learning, by a growing number of researchers (Chen, 2008: 1015).

Among studies related to teachers' perceptions about internet-assisted language learning in EFL instruction, a study conducted by Lau and Sim (2008) showed that teachers have mainly positive attitudes towards information and communication technologies in education. Chen (2008) also demonstrated that attitude was one of the factors influencing internet use.

Although most of the studies have emphasised the impact of computer-assisted and internet-assisted language teaching and EFL students' attitudes towards these teaching methods (Afshari, Ghavifekr, Siraj and Jing, 2013; Kılıçkaya and Seferoğlu, 2013; Mohktari, 2013; Rahimi and Yadollahi, 2011; Schofield and Davidson, 2003; Timuçin, 2006; Zaini and Mazdayasna, 2014), there is a lack of research on the perceptions and perspectives of EFL instructors' and EFL teachers' on the integration of internet in language learning and teaching (Alkahtani, 2011; Amirshuibani and Iraj, 2014; Başöz and Çubukçu, 2014; Pinner, 2012; Rafiee and Purfallah, 2014).

Therefore, the main objectives of this paper are to find out whether there was a difference between EFL instructors' perceptions and state and private schools EFL teachers' perceptions towards the integration of internet-assisted language teaching (IALT)

in EFL instruction, and to reveal their perceptions of internet activities in their teaching process if used, and whether or not they perceive barriers to internet use in language classrooms in both institutional contexts. The study tries to provide insight for other scholars and officials regarding the perceptions of teachers and instructors in both institutions unfolding internet use in language learning. Additionally, aiming to reveal barriers against the internet use in the classroom context, this current study will guide further research, as there remains scarce resources regarding internet-assisted language teaching in the Turkish context.

Literature Review

Internet Use and Language Teaching

Rico and Vinagre (2000) argue that the use of the internet can be interactive and cooperative with the help of e-mail, conferencing tools and newsgroup, a virtual group of learners can exchange knowledge, ideas and points of view on any number of topics. Therefore, the internet can increase EFL learners' motivation to learn the foreign language.

Nevertheless, many factors have an effect on integrating internet-assisted language learning into foreign language instruction successfully. According to Cuban (1993), there have been two barriers for implementation of technology in language teaching, namely: first-order barriers including external and institution-related problems; and second-order barriers including internal and teacher-related problems.

Teacher barriers are: time; knowledge and skills; training; previous negative experience; fear and anxiety; and attitudes (Cuban, Kirkpatrick and Peck, 2001; Fabry and Higgs, 1997; Migliorino and Maiden, 2004; Pelgrum, 2001; Russel and Bradley, 1997). Therefore, EFL teachers' perceptions, beliefs and attitudes towards internet-assisted language teaching (IALT) are critical elements for integrating IALT successfully into their teaching system. Zhao and Tella (2002: 2) state that "the ability to teach with technology is quite different from the ability to use it, because technology must be integrated with a sound pedagogical framework". Additionally, a study conducted by Zhao and Campbell (cited in Hartley, Treagust and Ogunniyi, 2008: 601) revealed that the more often the teachers used technology in their classrooms, the more positive attitudes and perceptions towards technology. Thus, negative experiences and a lack of technological knowledge can decrease teachers' sense of confidence, and can cause uncertainty and even fear when it comes to IALT. Additionally, Sokoloff and Thornton claimed that the use of computers as a teaching material necessitates a combination of knowledge, skills and experiences for selecting suitable teaching strategies (Molefe, Lemmer and Smith, 2005). As a result, teachers may not become willing to take part in internet-assisted language teaching facilities, and may not apply them in their teaching (Chen, 2008: 1017).

Related Research on EFL Teachers' Perceptions

Most studies reviewed students' attitudes towards learning English in computer-based language teaching environment (Afshari, Ghavifekr, Siraj and Jing, 2013; Akbulut, 2008; Aykaç, 2005; Kılıçkaya and Seferoğlu, 2013; Mohktari, 2013; Rahimi and Yadollahi, 2011; Önsöy, 2004; Zaini and Mazdayasna, 2014). The findings of these studies demonstrated that students showed generally positive attitudes towards computer-based language teaching. However, the studies on the perspectives and attitudes of EFL teachers and instructors towards computer-based and internet-assisted language teaching were limited in the literature (Alkahtani, 2011; Amirshuibani and Iraj, 2014; Arkin, 2003; Aydın, 2013; Başöz and Çubukçu, 2014; Chen, 2008; Çelik, 2013; Pinner, 2012; Rafiee and Purfallah, 2014; Shin and Son, 2007).

Related literature demonstrates that EFL teachers and instructors generally have positive attitudes towards the use of computers and the internet in language teaching. In Pinner's study (2012), which investigated teachers' attitudes and motivations towards using computer-assisted language learning (CALL), the results showed that there was a general eagerness amongst teachers to use computers in their classes more. Another study conducted by Alkahtani (2011) examined female faculty members' beliefs and attitudes towards CALL integration in an EFL context. The results revealed that they had positive beliefs and attitudes towards the use of computers in language teaching. Rafiee and Purfallah (2014), moreover, conducted a study on the perceptions of junior high school teachers towards using computers in language learning. Most of the teachers harboured positive perceptions about the use of computers, but considered themselves not competent enough to cope with some basic computer functions.

Another study conducted by Arkin (2003) focused on EFL teachers' perceptions of the use of computer technology resources in language instruction. The findings revealed that teachers who had computer technology training held a more positive attitude towards the use of computers in vocabulary instruction.

Additionally, Shin and Son's (2007) study, which examined 101 Korean secondary school EFL teachers' perceptions and perspectives on the use of the internet for teaching purposes, concluded that the key factors influencing the use of the internet in the classrooms were teachers' personal interest, teachers' abilities to integrate internet resources into class activities, and computer activities and technical support at schools.

Another study conducted by Chen (2008) in Northern Taiwan showed EFL teachers' attitude to be among factors that were effective to internet use. Moreover, a study by Çelik (2013) revealed that Turkish EFL instructors had positive perceptions of IALT, but that they had difficulty in finding suitable teaching materials, and integrating the internet into their teaching. Aydın's (2013) research also demonstrated that Turkish EFL teachers have positive attitudes towards computer use and integration, but they need technical and instructional support.

In light of the fact that most of the studies have examined students', teachers or instructors' perceptions and attitudes towards using computers and internet in language teaching in one institution, there is still need for a study comparing the differences between higher education institutions and state/private schools in terms of computer and internet integration, internet activities used by teachers and barriers against IALT in order to get a sense of which institutional teaching environment is in greater need of such methods. As a consequence, the current study intends to compare the difference between EFL university instructors' perceptions and secondary and high school EFL teachers' perceptions towards the integration of internet-assisted language teaching (IALT) in EFL instruction. The study tries to answer the research questions below:

1. Is there a difference between Turkish EFL instructors' and state and private school EFL teachers' perceptions towards Internet-assisted language teaching in EFL instruction?
2. Is there a difference between Turkish EFL instructors' and state and private school EFL teachers' perceptions in terms of internet resources used in language teaching?
3. Is there a difference between Turkish EFL instructors' and state and private school EFL teachers' perspectives in terms of the reasons preventing internet use in EFL classes?

Methodology

This study compared the difference between EFL instructors from several universities in different cities in Turkey and EFL teachers at state and private schools of Osmaniye (a town in the Mediterranean Region of Turkey) in terms of their perceptions towards integrating internet-assisted language learning into EFL instruction and investigating the internet resources used to enhance language learning and barriers preventing internet use in EFL classes. In this article, the convenience sampling technique was used. Participants were selected according to their availability and proximity to the researcher (Büyükoztürk et al., 2009: 91).

Participants

The research was conducted with 30 EFL instructors at different Turkish universities and 52 EFL teachers at different state and private schools of Osmaniye, a town in the Mediterranean Region of Turkey. Both online and paper surveys were administered to participants of the study. It should be noted that the sample group

was randomly chosen from different state universities in different parts of Turkey and state and private schools of Osmaniye, in order to compare the differences of perceptions towards internet-assisted language teaching. The reason the researcher did not include any participants from private universities was due to the different curriculum procedure between the state and private universities. The participants voluntarily agreed to take part in the study.

Table 1 presents background knowledge on participants, including demographic variables such as gender, age and experience.

Of the participants, 17 (56.7%) of EFL instructors and 32 (61.5%) of EFL teachers participating the study were female. While the teaching experience of participating EFL instructors and EFL teachers ranged from less than five to over 20 years, which shows that 15 (50%) of EFL instructors had less than five year experience, with 29 (55.7%) EFL teachers had teaching experience between five and 14 years.

Data Collection

In this study, the researcher used a questionnaire originated by Shin and Son (2007), due to the fact that it was understandable to the participants, and that it measured the focus of the study conducted by researchers. Nevertheless, the researcher eliminated some questions in Section 1 regarding the specific purposes. After eliminating some questions, the instrument was checked by the three proficient EFL instructors and piloted to a group of participants including 20 teachers and instructors, for the purposes of validity and reliability. Cronbach's alpha value was calculated. The Cronbach coefficient for the questionnaire was 0.78. The questionnaire used in this research is made up of three sections:

- demographic sections for respondents' background information;
- Likert scale statements on respondents' perceptions on internet use; and
- an open-ended question section to elicit the respondents' comments on the use of the Internet for the teaching of English as a foreign language.

As for the trustworthiness of the qualitative (open-ended question section) method, the researcher used 'member checking' procedure, which involved taking data and interpretations back to the participants in order to confirm their responses and 'audit trail' procedure, which included an external auditor, who reviewed the qualitative inquiry (Creswell and Miller, 2000). A total of 82 completed questionnaires were returned within two-month period. The data collected from the questionnaire was analysed quantitatively and qualitatively.

Results

The methodology applied in this study was a mixed method, containing both quantitative and qualitative methods. The quantitative data was statistically analyzed using the mean, standard deviation, frequency, percentage and t-test while the qualitative part contains open-ended questions. Data of the qualitative part were collected from the interview conducted with EFL instructors and teachers through meeting. The interview aimed to assess the depth of instructors' and teachers' perceptions

about IALT, internet in language teaching and barriers against internet usage. The findings obtained from the study are divided into four subsections: EFL instructors' and teachers' perceptions towards IALT; the internet activities/resources used in language teaching; barriers preventing internet-use in the classrooms; and the results of qualitative study.

Results of the Quantitative Study

Perceptions towards internet-assisted language teaching

The first research question compared the EFL instructors' and state and private school EFL teachers' perceptions towards IALT in EFL instruction. In this study, 110 EFL instructors' and teachers' were asked about their perceptions towards IALT from which 82 took part in the study. Some of the participants filled the survey but not properly, therefore 28 of them were not included in the study.

Table 2 and Table 3 demonstrate the Turkish EFL instructors' and Turkish state and private school EFL teachers' perceptions towards IALT in EFL classrooms with fifteen items, using a Likert scale with four options ranging from "strongly disagree (1) to "strongly agree" (4).

According to results obtained from the questionnaire, comparing the results of Table 2 and Table 3, the values demonstrated that participants expressed positive perceptions towards using internet-assisted language teaching in EFL instructions. One hundred percent of respondents (EFL instructors) in Table 2 agreed that the internet provides a rich learning environment, motivates students easily in the classrooms (82.7% for EFL teachers) and felt that using ESL/ EFL web-sites are useful for teaching English (92.3 % for EFL teachers). On the other hand, only 40% of respondents in Table 2 and 44.2% of participants in Table 2 gave positive responses to the question of replacing textbooks with internet resources, which demonstrates that a large number of participants (both instructors and teachers) do not think it would be appropriate to replace course books with internet resources. Moreover, 96.6% of the EFL instructors and 90.4% of EFL teachers correspondingly agreed that student can improve their English skills through the use of the internet, in addition to improving their communication skills by emailing, and chatting online (93.3% for instructors and 90.4% for teachers).

Nevertheless, Table 2 and Table 3 also show significant differences between Turkish EFL instructors and EFL teachers, in terms of their self-assessment towards internet-assisted language learning (questions 11, 12, 13, 14, 15). The findings have shown that EFL instructors (80%) take more responsibility for the success of IALT than EFL teachers (61.6%). Moreover, 83.3% of instructors consider themselves competent to use internet-based materials in the classrooms, and this percentage is 69.2% for state and private school EFL teachers. While most EFL instructors also know how to integrate internet resources into classroom curricula, nevertheless, EFL teachers are not confident enough to do so (67.3%). Therefore, EFL instructors in higher education institutions are more eager to use internet-based materials in classrooms (96.7%) than EFL teachers in state and private schools (78.9%). The results demonstrated that Turkish EFL instructors in universities have more self-confidence in using IALT in language instruction, when compared to EFL teachers in state and private schools.

	Gender		Age			Teaching Experience		
	Male	Female	Under 25	26-35	36-50	Under 5	5-14	15-25
Universities	13 (43.3%)	17 (56.7%)	7 (23.3%)	20 (66.7%)	3 (10%)	15 (50%)	12 (40%)	3 (10%)
State/ Private Schools	20 (38.5%)	32 (61.5%)	7 (13.5%)	30 (57.7%)	15 (28.9%)	13 (25%)	29 (55.7%)	10 (19.2%)

Table 1: Background information on participants

N=30	Strongly Disagree (1)		Disagree (2)		Agree (3)		Strongly Agree (4)		M	Std
	N	%	N	%	N	%	N	%		
1. The internet provides non-native speakers of English with a rich learning environment.	-	-	-	-	16	53.3	14	46.7	3.47	.507
2. Internet tools can be used for teaching purposes.	-	-	1	3.3	13	43.3	16	53.3	3.50	.572
3. Internet resources can replace textbooks.	4	13.3	14	46.7	12	40	-	-	2.27	.691
4. It is easy to find ESL/EFL materials on the Web.	-	-	2	6.7	19	63.3	9	30	3.23	.568
5. ESL/EFL Web sites are useful for teaching English.	-	-	-	-	23	76.7	7	23.3	3.23	.430
6. Students can be motivated by the use of the internet in the classroom.	-	-	-	-	21	70	9	30	3.30	.466
7. Students can improve their English skills through the use of the internet,	-	-	1	3.3	19	63.3	10	33.3	3.30	.535
8. Students can learn how to use internet resources for learning English for themselves.	-	-	2	6.7	25	83.3	3	10	3.03	.414
9. Students can improve communication skills by e-mailing or chatting with native speakers of English online.	1	3.3	1	3.3	16	53.3	12	40	3.30	.702
10. Students will be more attentive in internet-assisted English language teaching classes.	-	-	2	6.7	22	73.3	6	20	3.13	.507
11. I am responsible for the success of internet-assisted English language teaching.	2	6.7	4	13.3	21	70	3	10	2.83	.699
12. I am competent to use internet-based materials in the classroom.	-	-	5	16.7	18	60	7	23.3	3.07	.640
13. I know how to integrate internet resources into existing classroom curricula.	-	-	3	10	18	60	9	30	3.20	.610
14. I need training to improve my internet literacy skills.	5	16.7	11	36.7	14	46.7	-	-	2.30	.750
15. I would like to use internet-based materials and activities in my classroom as much as possible.	-	-	1	3.3	18	60	11	36.7	3.33	.547

Table 2: Turkish EFL instructors' perceptions towards IALT

N=52	Strongly Disagree (1)		Disagree (2)		Agree (3)		Strongly Agree (4)		M	Std
	N	%	N	%	N	%	N	%		
1. The Internet provides non-native speakers of English with a rich learning environment.	2	3.8	7	13.5	21	40.4	22	42.3	3.21	.825
2. Internet tools can be used for teaching purposes.	3	5.8	3	5.8	19	36.5	27	51.9	3.35	.837
3. Internet resources can replace textbooks.	6	11.5	23	44.2	17	32.7	6	11.5	2.44	.850
4. It is easy to find ESL/EFL materials on the web.	2	3.8	3	5.8	28	53.8	19	36.5	3.23	.731
5. ESL/EFL websites are useful for teaching English.	1	1.9	3	5.8	22	42.3	26	50	3.40	.693
6. Students can be motivated by the use of the internet in the classroom.	1	1.9	8	15.4	22	42.3	21	40.4	3.21	.776
7. Students can improve their English skills through the use of the internet.	1	1.9	4	7.7	31	59.6	16	30.8	3.19	.658
8. Students can learn how to use internet resources for learning English for themselves.	1	1.9	9	17.3	37	71.2	5	9.6	2.88	.583
9. Students can improve communication skills by e-mailing or chatting with native speakers of English online.	2	3.8	3	5.8	30	57.7	17	32.7	3.19	.715
10. Students will be more attentive in internet-assisted English language teaching classes.	1	1.9	15	28.8	21	40.4	15	28.8	2.96	.816
11. I am responsible for the success of internet-assisted English language teaching.	4	7.7	16	30.8	25	48.1	7	13.5	2.67	.810
12. I am competent to use internet-based materials in the classroom.	2	3.8	14	26.9	32	61.5	4	7.7	2.73	.660
13. I know how to integrate internet resources into existing classroom curricula.	-	-	17	32.7	35	67.3	-	-	2.87	.561
14. I need training to improve my internet literacy skills.	7	13.5	20	38.5	19	36.5	6	11.5	2.46	.874
15. I would like to use internet-based materials and activities in my classroom as much as possible.	1	1.9	10	19.2	21	40.4	20	38.5	3.15	.802

Table 3: Turkish state and private school EFL teachers' perceptions towards IALT

In order to determine whether there is a statistically significant difference between EFL instructors at universities and EFL teachers at state and private schools, independent t-test was conducted. The results of t-test is given in Table 4.

	n	x	ss	sd	t
EFL instructors	52	2.996	0.746	80	0.706
EFL teachers	30	2.884	0.576		

Table 4: Results of t-test of Turkish EFL instructors' perceptions towards IALT and Turkish state and private school EFL teachers' perceptions towards IALT

As $t=0.706$ is $p>0.05$ there is not a statistically significant difference related to the means in the level of internet usage between Turkish EFL instructors' perceptions towards IALT and Turkish state and private school EFL teachers' perceptions towards IALT. This finding shows that there is a kind of similarity of Turkish EFL instructors' perceptions and Turkish state and private school EFL teachers' perceptions towards IALT.

Perceptions in terms of internet resources used in language teaching

The second question concerns the perceptions towards the internet activities/resources used in language teaching, allowing respondents to select more than one response. The internet activities used by EFL instructors and EFL teachers were presented in Figure 1:

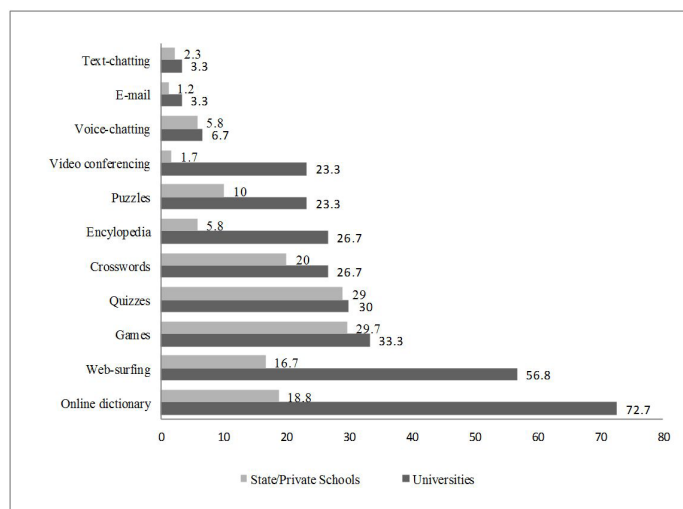


Figure 1: The internet activities/resources used in language teaching classrooms (N=82)

Figure 1 demonstrated respondents' use of internet activities in their classrooms, revealing that the most popular activity for Turkish EFL instructors is online dictionaries, which is used by 72.7% of respondents, and the least commonly used activities are email and instant messaging, which are used by 3.3% of Turkish instructors. The findings further indicated that over half of Turkish EFL instructors (56.8%) stated that they make use of web-surfing in their language teaching classrooms. Other activities include puzzles (23.3%), video-conferencing (23.3%), voice-chatting (6.7%), encyclopedia (26.7%) and crosswords (26.7%).

On the other hand, Figure 1 also shows the participants' use of internet activities in the classrooms in state and private schools of Osmaniye. According to the findings obtained from the chart, the most commonly used activity are games, which are used by only the small percentage of respondents (29.7%). The

least popular activity is, on the other hand, email, which is used by 1.2% of Turkish private and state school EFL teachers. It is clear from these data that while the percentage of using internet activities in universities is raising up to 72.7%, the percentage of using internet activities in state and private schools of Osmaniye is 29.7%, which is much lower than the usage of universities. It is clear that Turkish instructors were found to integrate internet usage into their language teaching environment much more frequently than state and private school EFL teachers.

Perspectives in terms of the reasons preventing internet use in EFL classes

Concerning the third question, respondents were asked to identify their perspectives on barriers for internet usage in language teaching environments. Figure 2 presents the percentages of participants identifying those reasons preventing internet use in language teaching classrooms.

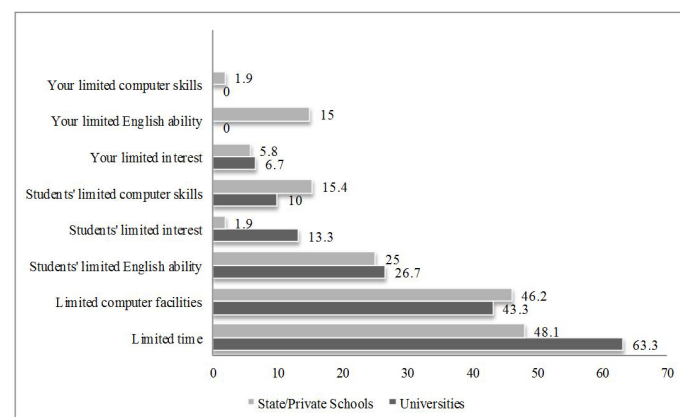


Figure 2: Barriers against Internet use in language teaching classrooms (N=82)

The findings revealed that lack of time is a significant barrier to internet assisted language teaching in both university (63.3%) as well as state and private school contexts (48.1%). Most participants had a limited time in order to integrate IALT into their teaching system. As for the second barrier, while 43.3% of EFL instructors consider access to computer facilities as a second barrier, the percentage is 46.2% for state and private schools. The data further indicates that EFL instructors did not regard their own English ability and computer skills as the barrier to internet use in their language teaching classrooms, whereas 15% of EFL teachers of state and private schools stated that their own English ability was the reason for not using the internet in their classrooms.

Results of the Qualitative Study

In order to better understand participants' opinions and perceptions regarding the integration of internet use in their language teaching classrooms, the questionnaire included one open-ended question. 56.6 % (n=17) of EFL instructors answered this question, whereas the researcher got responses from 32.6% (n=17) of the state and private school EFL teachers. The descriptive qualitative analysis resulted in three main themes: EFL instructors' and teachers' view of IALT, using internet in language teaching and barriers against internet usage.

The data showed that both groups of participants had a positive perception towards internet use in language teaching. Among EFL instructors and EFL teachers, some stated that the internet enables a variety of free English teaching materials for enhancing student motivation and it could be used as a source of English for all levels of learners. Teachers may make use of authentic

materials through the internet, which will help them to improve language skills very easily. One of the participants said, “[the] internet plays a major role in the lives of young people today. Children engage in online activities both inside and outside the classroom, so it is beneficial. It is not a must but makes it easier and fun during class.” Another noted, the “internet enables efficiency in [the] four skills, especially listening and speaking, [which] should be supported with materials acquired on the internet.”

Another theme emerged from suggestions made by EFL instructors for using internet in language teaching effectively. One participant stated that “students could be asked to create their own blogs online and in writing classes, the blogs can be evaluated as their portfolio”. Another participant suggested that “[the] internet shouldn’t be the main basis of the lesson, but teachers should integrate it to cause curiosity in the class as well as providing authentic materials which would also improve students’ autonomy in language classes.” Another participant said, “it would be useful to train both teachers and students about internet literacy skills in order to make use of the internet effectively.”

EFL instructors did not explain many barriers against internet use in language teaching, however, noted that state and private school EFL teachers indicated several difficulties in using the internet in the classroom as follows: having difficulty in controlling the internet use in the classroom; having a slow internet connection or technical problems during the class; teachers’ incompetence of computer and internet literacy skills, being in need of training are among barriers to using Internet in their language instruction. One of the participants said, “it is useful, but many teachers do not use it due to a lack of interest and ability.” Another participant said, “Teachers are in need of training in order to improve their Internet literacy skills and to integrate into language teaching”.

Discussion

The results obtained from the current study are consistent with the previous research on the perceptions, attitudes, beliefs and self-efficacy of EFL instructors and teachers towards internet-assisted language instruction and computer technology (Alkahtani, 2011; Amirshabani and Iraj, 2014; Arkin, 2003; Aydın, 2013; Başöz and Çubukçu, 2014; Chen, 2008; Çelik, 2013; Külekçi, 2009; Pinner, 2012; Rafiee and Purfallah, 2014; Shin and Son, 2007). For instance, the study conducted by Başöz and Çubukçu (2014) investigated the attitudes of pre-service EFL teachers of English towards using computers in language teaching. The findings of this study similarly showed that teachers of English have positive attitudes towards the use of computers in their language teaching.

Furthermore, the results of this study are in line with the findings of previous studies on the reasons preventing the use of technology in the classrooms (Blake, 2007; Chen, 2008; Çelik, 2013; Egbert, Paulus, and Nakamichi, 2002; Park and Son, 2009; Shin and Son, 2007). The study conducted by Chen (2008) found that finding appropriate materials, creating materials, as well as keeping up with software upgrades and improvements, take a long amount of time. Shin and Son’s study (2007), also emphasized four key factors affecting internet use: teachers’ interest; teachers’ abilities; computer facilities; and technical support in schools.

The present study provides some practical recommendations for scholars and to officials. First of all, there should be a special training programme for computer technology in the pre- and in-service teaching programmes in faculties regarding how to integrate the internet into their language instruction in order to make teachers and instructors self-confident in applying IALT. Second, it is recommended that classrooms be equipped with the necessary and appropriate technical support in order to remove connection and technical problems. Finally, it is also crucial to design materials integrating internet-assisted language teaching activities in language programmes in order to enhance foreign language learning.

Conclusion

Findings of the present study showed that participants expressed positive perceptions towards the use of the internet in EFL context, and that they are eager to integrate it into their language teaching classrooms. The authors (Kučírková, Kučera and Vostrá Vydrová, 2014: 85) showed that students expressed their views on the effectiveness of the e-learning course and their positive attitude to e-learning. This result shows similarity with our study and the other research conducted in Internet-assisted language teaching. In a study by Park and Son (2009), some of Korean EFL teachers’ perceptions were explored in terms of computer-assisted language learning (CALL). The findings of this study showed that EFL teachers have positive attitudes towards computer use in their classrooms. They believe that using computer in their classes can enhance and improve the way of teaching.

In another study by Kim (2008), 10 ESL/EFL teachers’ perceptions about the use and role of computer were investigated. The results of this study indicated that these teachers have positive attitudes to computer use and supported it as an instructional tool.

Ballester (2012) explored an intermediate level learners’ perceptions of use of a web-based multimedia program with real videos and tried to deal with its effectiveness and applicability in language teaching environment. From the data, it is claimed that learners improved their listening skills.

Most of the mentioned studies indicate the importance of computer technology and internet use in teaching and learning environment and they may help in motivating and improving teachers’ and learners’ outcomes. The results also showed that both EFL instructors and EFL teachers are inclined to have positive attitudes towards using the internet in their classroom and taking the results into consideration, it can be claimed that there is no statistically significant difference between both groups.

However, it can be said that EFL instructors seem to have more confidence in applying internet activities in their classrooms. Furthermore, the two most frequently used internet activities, according to EFL instructors’ perceptions, are online dictionaries (72.7%) and web-surfing (56.8%), the two least frequently used activities are e-mail (3.3%) and text-chatting (3.3%), whereas the activities EFL teachers perceive, which were applied most are games (29.7) and quizzes (29%), where the least frequently used ones are emails (1.2%) and video-conferencing (1.7%). Moreover, the most significant barriers against using the internet were found to be the restrictions of time and limited computer facilities for both groups of participants.

In view of the findings about qualitative analysis, data demonstrated three main themes: participants' view towards IALT; using the internet in language teaching; and barriers against internet usage. EFL teachers perceived managing internet use, internet disconnection or technical problems, internet illiteracy and lack of training as barriers to using the internet in their language instruction.

This current study was limited in the following ways. The first one was the small sample size of the participants; 30 EFL instructors from higher education institutions in different cities of Turkey, and 52 EFL teachers from state and private schools in Osmaniye in Turkey. More participants might have been generalisable to the population. Another limitation was that this study was confined to the descriptive data obtained from the questionnaire, and one open-ended question designed by Shin and Son (2007). To conclude, further research is required to specify the problems of EFL instructors and teachers regarding curriculum development, classroom management, teaching procedure in terms of the use of IALT in Turkish EFL contexts.

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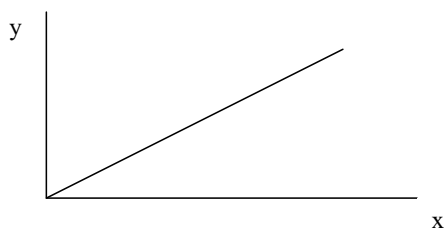


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