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An independent scientific journal
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in pedagogy

e-PEDAGOGIUM

All contributions were reviewed. Each contribution was reviewed by two reviewers.
Names of the reviewers will be published in the last issue of given volume of the journal.

Content

Review

Editorial

Dear Readers,

It is a great honour to introduce you the new issue of the e-PEDAGOGIUM Journal which presents 10 contributions focusing on different areas and aspects of the pedagogical theory and practice.

In the first contribution, the authors Polášek & Sedláček describe interesting opportunities of data analysis in the pedagogical research. The aim of their contribution is to present new possibilities for the statistical analysis of pre-test/post-test data types measured in a pedagogical experiment.

The issue of development of information technology competences at the University as a place of scientific research and of education of intellectual elites is processed by the author Muchacki in his theoretical study.

The authors Kocourková, Kantorová & Šafránková, take a deeper look at the problem of factors influencing the level of primary prevention of risk behaviour in preschool education institutions, perceived also within the dimensions of school climate. Their results are based on the research focused on evaluation of the level of primary prevention of risk behaviour from the perspective of kindergarten teachers

Individual aspects of language competences and the Czech language as a second language in the context of *Diagnostic Tests For The Children of Immigrants Attending Primary Schools* are presented in the paper by Vodičková & Kostelecká.

Kliment & Šotola describe the current approach to and education of Muslim pupils at schools in the Czech Republic. In addition to the theoretical basis of accommodation and assimilation as well as the educational diversity itself, they also point out the importance of well functioning connection and cooperation between the pupils, parents and teachers

The theoretically conceived contribution from the author Hanáková focusing on hearing disability and options of implementing early intervention is titled *Early Intervention in Context of Special Education – Communication between Parents of Hearing Impaired Children and Professionals with an Emphasis on Auditory-verbal Therapy*.

Interesting empiric findings on the knowledge of teachers at standard elementary schools about pupils with special educational needs are brought in the paper by Horváthová & Finková. Their main finding is that the teachers missed important information and knowledge of special educational needs in integrated pupils, and methods of inclusion.

Another contribution thematically focused on the area of hearing disability introduces the findings of the author Wu, who in her research focused on the Educational Placement and School Adjustment for children with cochlear implant in the Chinese Province of Sichuan.

Potměšilová & Potměšil present some interesting aspects of Art Therapy as an important part of the curriculum within the training of future special pedagogues. The authors analyse selected aspects of education in art therapy for students of special pedagogy at the Faculty of Education, Palacký University Olomouc and the Sichuan Normal University in Chengdu.

The last scientific paper titled *Comparison of live satisfaction and its components in current teachers and selected profession groups,* from the collective of authors Sigmund, Kvintová, Pugnerová & Hřebíčková, describes the results of an extensive research which involved a total of 544 adults from various professions, of which 213 were teachers. It is especially noteworthy among their remarkable results that the highest values in teachers were scored in the item of satisfaction with own children and partnership and on the contrary, while the lowest values of teachers' life satisfaction were reported in the item of finance.

As usual, apart from the aforementioned professional contributions, this issue of the e-PEDAGOGIUM magazine also contains two reviews of the books published in 2013, in particular: *Special education teacher* and *Theory and Practice of Geometric Manipulations in Primary Education*.

We believe that the findings and conclusions from the presented works will contribute not only to extension of the theoretical platform of the particular scientific fields but will be also a valuable driver to support and enhance pedagogical practice.

Thank you for your cooperation in 2014 and wishing you many personal and professional successes in 2015.

Vojtech Regec and editorial Board of the e-PEDAGOGIUM Journal

Articles

New Possibilities of Analysis of Experimental Data in Pedagogical Research

Vladimír Polášek, Lubomír Sedláček

Abstract

The aim of this paper is to present new possibilities of the statistical analysis of pretest-posttest data types measured in a pedagogical experiment. These possibilities will allow us to eliminate the effect of so-called disruptive independent variables that could adversely affect a dependent variable and thus, the research results. By using a model example, we present the design of a suitable experimental plan. Further, we illustrate advanced statistical techniques – Analyses of Variance and of Covariance using a real example.

Key words: Pedagogical experiment, pretest, posttest, analysis of variance for difference scores, analysis of covariance.

Introduction

Although pedagogical experiment is one of the basic methods of educational research and there are such kinds of pedagogical problems that cannot be credibly answered without making an experiment (e. g. verification of new forms and methods of teaching, implementation of major changes in education reform, etc.), contemporary Czech educators tend to neglect this method (Průcha, 2000, p. 197). Jan Průcha (2000, p. 198)

reports the relatively high complexity of this research procedure as the main reason. Its application must meet a number of requirements; the satisfaction of which is linked with considerable problems.

Pedagogical experiment is used to research the learning process. It studies the behavior of entities – i.e. individuals participating in the experiment with the introduction of a controlled change. The experimenter intentionally changes the conditions by manipulations with variables and examines the effects of this experimental intervention and its results. So, experiment is a research method for the verification of scientific hypotheses about causal relationships between phenomena (Průcha, 2003).

Scheme of the research method and its characteristics

As the most fundamental problem in the implementation especially of a field experiment conducted in the natural environment of the studied subjects (i.e. in vivo); we considered the design of such an experimental plan that would have the maximum ability to eliminate the effect of so-called disruptive variables which could adversely affect the dependent variable, and thus significantly skew the results of the research. Part of that plan is the appropriate use of advanced statistical methods and statistical programs for the analysis of experimental data. The following text, which provides two different evaluation examples of a pedagogical experiment, could serve as instructions to deal with these difficulties.

The basic procedures are demonstrated on the model example. We have formulated the following research problem: *Do the results of computer-assisted teaching differ from the traditional frontal teaching of geometry with the dominant teacher interpretation?* Thus, we will compare the traditional teaching method typical for the Czech educational environment and so-far less used method: computer-assisted teaching implemented using some of the programs in the field of Dynamic Geometry, e. g. GeoGebra, Cabri Geometry II Plus, etc. We formulate the null hypothesis for this research problem as follows: H_0: *Increase of knowledge and skills of the pupils acquired during computer-assisted teaching of "Congruent Projection" is equal to the increase in pupils' knowledge and skills gained in the frontal teaching of "Congruent Projection".*

For the best research method in this case, we consider pedagogical experiment which is realized by the technique of parallel groups (Chráska, 2007, p. 29). This type of experiment is based on the fact that a researcher is working with two groups. The control group is not exposed to the intervention whose effects are researched. The experimental group is exposed to the studied type of intervention. The other conditions are as equal as possible; it ensures that the incurred differences can be attributed only to the debit of examined interventions (Hendl, 2004, p. 60). In our case, we handle in the experimental group with the independent variable, which is a teaching method, and

we examine its influence on the dependent variable which is an increase in students' knowledge and skills. The teaching method is the only element that differentiates two groups from each other.

As already mentioned above, the main problem with this type of experiment is to design its plan in such a way that the elimination of the effect of the other disruptive independent variables (covariates) on the dependent variable is maximized. If we cannot separate or measure this effect on the dependent variable and adjust the results when evaluating with an appropriate statistical method, we often approach randomization which is the process of a random placing of subjects to the groups being compared. In our case, we propose to use a combination of these two possible procedures and to structure the experimental plan so that the way of experiment arrangement and the used evaluation method would allow us to take the effect of covariates into account and allow us to estimate the "net" effect of the intervention.

Therefore, we propose to divide the arrangement of the whole research into the following phases.

Randomization

We will **randomly** select two classes at the relevant school. One class will be determined as "experimental", while the other one as "control". In no case do we try to divide the students into two equal groups using an assessment test – according to their current level of geometry knowledge and skills – before the start of the experiment. This method of rearranged or paired groups leads to fragmentation of previously organized classes, which is very inconvenient and, from an administrative viewpoint, practically impossible. For this reason, it is better to proceed to the use of modern statistical procedures (Analysis of Covariance, Linear Mixed Model, Analysis of Variance, see below), which allow us to perform an equally reliable experiment without regrouping the pupils into new groups (Chráska, 2007, p. 31).

We further recommend that each class be taught by different, **randomly** selected Mathematics teachers. The teaching both groups by one teacher could affect the experiment due to greater teacher interest in one of the teaching methods.

Pretest

We will measure the current level of knowledge and skills in the field acquired so far classically through the curriculum of geometry in each student from the both groups by using didactic input test.

Application of Intervention

This phase of the experiment is crucial. It is characterized by performing the intervention in the experimental group by manipulating the independent variable, which is here the way geometry is taught. All other elements of the teaching process remain the same in both groups. In the experimental group, geometry is taught in the mathematics classroom, equipped with a computer and a data projector and using programs from the dynamic geometry field; while in the control group, geometry is taught using traditional frontal teaching methods with the dominant interpretation of the teacher, standard writing and drawing on the board.

Figure 1
Diagram of disruptive variables impact elimination
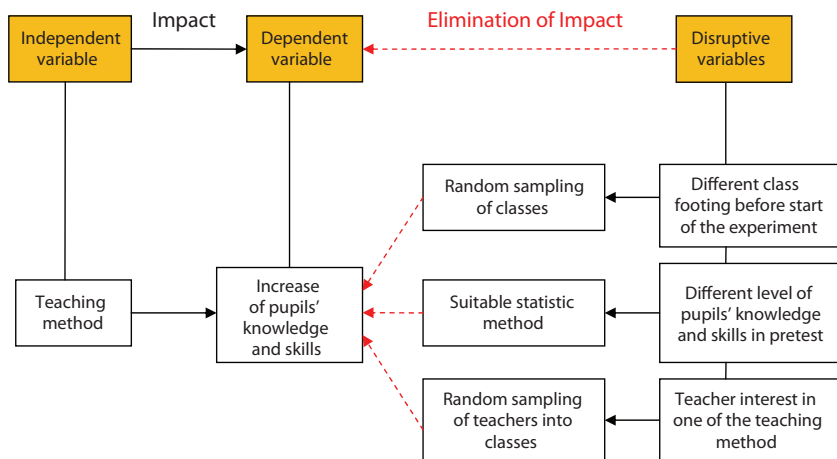
Comparison

The content of this penultimate stage of the teaching experiment is the statistical analysis of the data obtained in the didactic tests and their comparison in both groups.

Conclusion

In the final phase of the experiment, we will formulate the consequences of the intervention under study in the experimental group, i. e. whether significant differences in target geometry knowledge and skills in each group were measured, i. e. the acceptance or rejection of the null hypothesis.

Selection of a Statistical Method for Data Analysis

When selecting statistical methods, it was necessary to realize that we are working with uneven, unpaired groups; which means that the initial level of geometry knowledge and skills of students before the start of the experiment may be different in different groups. However, this can significantly affect the credibility of the whole research. Therefore, when analyzing the measured pretest – posttest data, the pretest values are considered to be one of the disruptive variables (covariates) and we must correct this undesirable effect.

There are two basic possibilities. At first sight, **analysis of variance for the difference scores** seems to be the easier procedure. We analyze the differences of pretest and posttest data by testing the differences of averages for the experimental and control groups. We determine change (i. e. the output – input difference) with each student and – using variance analysis, we compare the rates of changes in these groups. Another possibility is **analysis of covariance**, which combines regression analysis and analysis of variance. In this method, we make an adjustment to the output evaluation against the input evaluation with each student and compare only these adjusted values. By adjusting, we will obtain data that is not dependent on the students' initial knowledge and skills level. From this point-of-view, we will attain two similar groups without any comparison of them in advance. The principle of this method consists in the fact that we estimate regression of the final measured values to the initial values in every particular group. This yields estimates of the regression coefficients for both the experimental and control groups. Then, we will discover whether it is possible to consider the slopes of the regression lines as estimates of the same constant so that we test the hypothesis validity by the relevant statistics, which assumes that the real estimated slopes are identical. If we do not refute this hypothesis, we will assume that the two slopes are identical, thus the output test in both groups reacts to changes in the input test as sensitive. The finding is a necessary condition for the model application of covariance analysis. We assume therefore, that there is no real difference in the regression in both groups, the regression coefficients in the groups are equal, and the regression lines in both groups are parallel. It remains to decide whether we can identify them, or whether they are necessarily displaced relative to one another. Analysis of covariance

precisely consists in making this decision. In the event of a significant displacement, we will have a reason to reject the null hypothesis, which argues that the knowledge level of students in the experimental and control groups is the same, and we can lean toward the alternative hypothesis. We can therefore conclude that the output level of the students' knowledge is different in both the groups. Then it only remains to show which group of the students achieved significantly better results.

We consider the analysis of covariance as the optimal approach to the assessing the comparative experiments. However, it is necessary to meet the basic assumptions of this method. Only when they are fulfilled, is it possible to interpret the results. The basic assumptions are:

- classes were selected randomly to the groups,
- regression coefficients in the groups are equal,
- regression is linear,
- variance in the groups is homogeneous (homoscedasticity),
- normal classification in both the groups.

We can note that for both methods, the analysis of difference scores focused on the change between the pretest and the posttest, is simpler and does not require any assumptions of the regression conformity of the posttest to pretest data in the individual groups, which is a condition for the more complicated analysis of the covariance. However, the interpretation of differential scores is less valid if there are differences between the groups in the pretests. On the other hand, for equivalent groups, we gain no advantage when using covariance analysis. Therefore, it is recommended to make both the ways of analysis and compare their results. If the results come out the same, we have reason to consider them robust (Hendl, 2004, p. 395).

Figure 2
Diagram of a teaching experiment
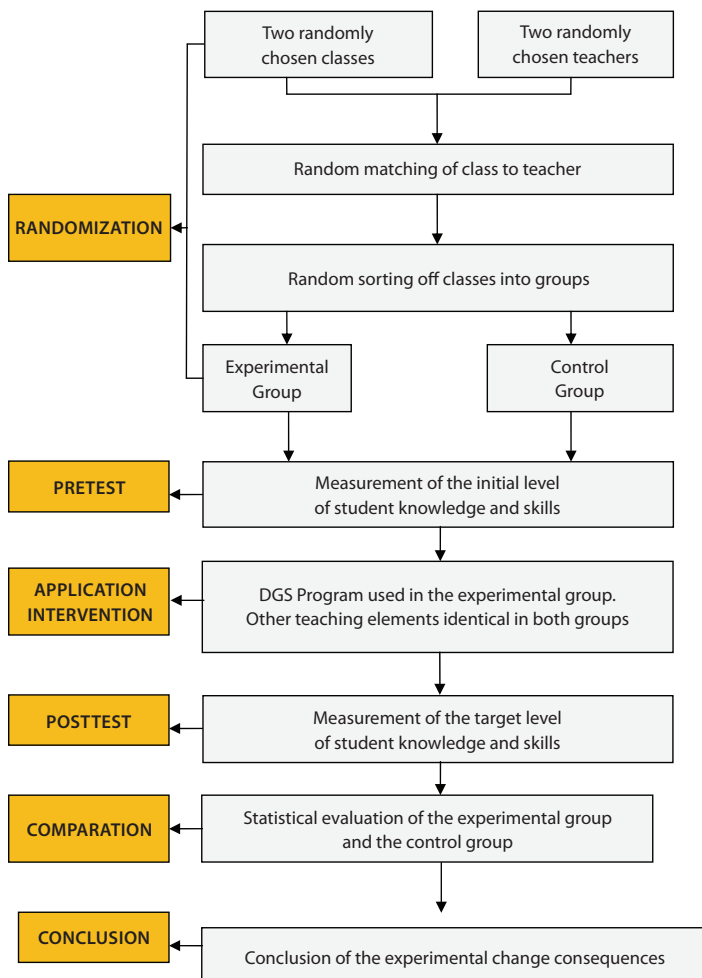
Statistical Evaluation of a Teaching Experiment

Now, we will demonstrate the basic procedures of both the methods with specific values. As mentioned above, we have data of two groups of the students (Experimental, Control), each student was evaluated by two tests (Input, Output). The goal is to compare these two groups.

Analysis of Variance for Difference Scores

We check for the difference between values of the output and the input tests with each student. These differences can be characterized by the following descriptive statistics:

Group	Average	Standard Deviation
Experimental	1.40	4.97
Control	−1.48	4.84

At first sight, it is apparent that the variability is comparable in both the groups (the classical F-test gives a value $F = 1.05$, p-value of $p = 85.1\%$), so it can be used as the Student's t-test. The test statistics $T = 2.96$ gives a p-value of $p = 0.4\%$, so – at the commonly used 5% level, we have **demonstrated a difference between the groups**. In the experimental group, a greater difference between the values of the output and the input test is demonstrated. A common estimate of the standard deviation of the two selections gives $S = 4.90$.

Analysis of Covariance

It is useful to complete the analysis of the covariance model by a graphical representation. The observations of the experimental group are expressed by triangles in Fig. 3; the observations of the control group by crosses. Each observation is illustrated by a point whose x-coordinate is given by the value of the input test and y-coordinate by the value of the output test.

Firstly, let's suppose that we interpolate the data in each group by the individual line. We get estimates of dependence in the form:
Output = 2.11 + 0.94* *Input* for the experimental group
Output = 1.68 + 0.77* *Input* for the control group

The slopes of the regression lines (0.94 and 0.77) are similar, so it is important to discover whether we can consider them to be two estimates of the same constants. The relevant

test statistics $T = -0.83$ lead to a *p*-value of $p = 41.0\%$, so the hypothesis according to which the real estimate slopes are compared is identical, we cannot refute this.

Furthermore, we will assume that both the slopes are identical, and thus the output tests in both the groups react equally sensitively to changes in the input tests. We assume therefore, that both the lines are parallel, and it remains to decide whether we can identify them with each other, or whether they are necessarily shifted relative to one another.

The parallel lines drawn on the diagram of Fig. 3 have the following equations:
Output = 3.42 + 0.83* *Input*   (Experimental)
Output = 0.77 + 0.83* *Input*   (Control)

The test of the hypothesis that the displacement of the lines in the vertical direction by $3.42 - 0.77 = 2.65$ is random leads to test statistics $T = 2.72$ with a *p*-value of $p = 0.8\%$. We have therefore, at the 5% level, proven that **both the compared groups differ from each other**. The resulting estimate of the standard deviation is equal to $S = 4.87$, so this is only slightly smaller than with the analysis of variance for differential scores.

Figure 3
Graphical representation of the results dependence of the output test on the input test, assuming that the slopes are identical
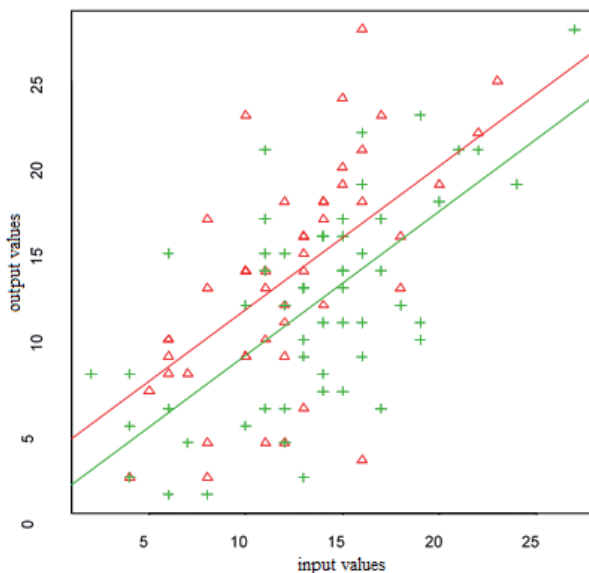
We can then verify for sure whether we can assume the fulfillment of the common assumptions for the application of a linear model. Shapir's Test of the distribution normality of the random component of the model leads to a *p*-value of $p = 71.4\%$, so it does not indicate a problem. Similarly, homoscedasticity (i.e. constant dispersion) tests can be $p = 88.9\%$ (versus the alternative of the variance dependence on the value of regression function), $p = 68.8\%$ (versus the alternative of different variances in these groups), $p = 99.6\%$ (according to the alternative of the variance dependence on the input test values). So, no problem appears even in the potential non-constant variance. The application of analysis of covariance of the model is therefore adequate.

Conclusion

The test results comparison by the variance analysis for differential scores can be considered a special case of the analysis of the covariance model, where we do not estimate a common slope of the regression lines but we choose it firmly straight number one. The hypothesis test that the real slope of the parallels equal one, leads to statistics $T = 1.62$ with a *p*-value of $p = 10.9\%$. We did not prove therefore, that it would be necessary to use the analysis of the covariance model. The ninety-five percentage reliability interval for the common slope is (0.63, 1.04), so it covers the value 1. We can consider the number one as a possible common slope.

Both the proposed methods are therefore applicable. Both also give results of the same quality. We have already demonstrated the difference between the experimental and control groups. In the analysis of difference scores, the released *p*-value of 0.4% was with 100 degrees of freedom, whereas in the analysis of covariance model the released $p = 0.8\%$ was with 99 degrees of freedom.[1]

Now, it remains to decide whether statistically significant differences between the achieved levels of knowledge and skills in the students can be attributed to the teaching methods used in the experimental and control groups. This can be only stated when the research plan was strictly respected and the influence of possible disruptive variables was eliminated. If the decision was to be complicated by the fact that each group consisted of two or more randomly selected classes, we would have to take account of this fact. The results of the tests within the given class might be more similar to each other than the results of pupils from different classes. The values from one class could therefore be dependent among themselves. For this reason, it would not be possible to use the classical analysis of the covariance model. It would be necessary to proceed to the so-called Mixed Linear Model, which combines fixed effects (i.e. constants characterizing the level of output knowledge and skills, a coefficient determining to what

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[1] All the calculations were performed using the freeware program R, which is freely available on the Internet (http://cran.r-project.org/).

extent the result of the entrance test affects the result of the output test) and random effects (i.e. expressing the fluctuation of the resulting test between classes) (Sedláček, 2009, p. 97).

Acknowledgement

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Development of Information Technology Competences at the University as a Place of Scientific Research and of Education of Intellectual Elites

Mateusz Muchacki

Abstract

Contemporary times make every person, including an academic teacher, face challenges concerning the application of modern media tools in professional work, especially the use of the Internet to increase the effectiveness and the quality of his/her professional activity. The author draws attention to the necessity of a significant change in the system of academic education to help academic teachers handle modern teaching requirements. Teaching at the university level should take into account state-of-the-art tools of the teaching technology supporting the student's general development, his/her information technology skills as well as the formation of innovative and creative attitudes, preparing them to many new professional actions (including ICT).

Key words: Information technology competences, information society, academic education

Rozvíjení schopnosti práce s digitálními technologiemi na Univerzitě jako místě pro vědecký výzkum a vzdělávání intelektuálních elit

Abstract

Dnešní doba staví výzvy před každým člověkem – také před vysokoškolským učitelem. Tyto výzvy se týkají moderního mediálního instrumentária v profesní práci, obzvláště pak využití internetu ke zvyšování efektivity a kvality jeho profesních činností. Autor v textu upozorňuje na nutnost zavedení podstatných změn ve vysokoškolském vzdělávání, staví před vysokoškolskými učiteli požadavky moderního vzdělávání. Didaktika vysoké školy by měla zohledňovat aplikaci nejnovějších nástrojů technologie vzdělávání a napomáhat tak celkovému vývoji studenta, jeho samostatného uvažování, schopnosti práce s digitálními technologiemi a utváření inovativního a kreativního postoje a připravovat ho na mnoho nových profesních činností.

Klíčová slova: ICT kompetence, informační společnost, vysokoškolské vzdělávání

Referring to P. F. Drucker's thought – it can be emphasized that the University, like "each organization (institutions), should now have one key competence: **innovativeness**" (Drucker, 2010, p. 137), regardless of the type of the industrial sector or the service area, as long as it intends to achieve success in the contemporary and, at the same time, diverse job market.

The contemporary job market, which also exists today in the media time and space as well as in the information technology time and space, makes every person, including an academic teacher, face challenges concerning the application of modern media tools in professional work, especially the use of the Internet to increase the effectiveness and the quality of professional activity. Thus, these challenges require the acquisition of **information technology competences**, such as:

[a] proficiency in the application of IT tools,

[b] becoming familiar with the application of information technology in various areas of life and in professional work,

[c] integration of the uses of information technology with various spheres of existence and with various areas of professional (occupational) activity and

[d] specialization in the application of knowledge on computer science and information technology (Sysło, 2010). The acquisition of IT competences should be a continuous educational process which ought to be implemented both at primary school (the place of education in the area of key competences) as well as at the university (as a place of scientific research and education of intellectual elites).

Two books which could be called heralds of the birth of **network society** or perhaps **society from the era of information technology (media civilization)** were published over the years. These books are: *"Computerspiele in der Kinderkultur"* (Fromme, Meder, Vollmer, 2000) and *"Children and Their Changing Media Environment"* (Fromme, Meder, Vollmer, 2000). The authors of the former – J. Fromme, N. Meder and N. Vollmer, showed and proved at the same time that *virtual worlds* "exist" in the life of contemporary people since their childhood. Therefore, today we can talk both about children's computer games *(Computerspiele)* (Fromme, Meder, Vollmer, 2000), as well as children's culture of computer games *(Computerspielkulturen)* (Fromme, Meder, Vollmer, 2000). Aditionally, in the other publication which is a joint publication, edited by S. Livingstone and M. Bovill, some authors, including: J. W. J. Beentjes, C. M. Koolstra, N. Marseille, T. H. A. van der Voort, S. Livingstone, showed the existential activity of the contemporary child in the area of the media (Fromme, Meder, Vollmer, 2000) – mostly in two periods – of mid – and late childhood.

Careful observation of the contemporary job market as well as of its needs and expectations allows for drawing a prudent conclusion that primary schools, secondary schools and universities – both in Poland and other EU countries – cannot keep up with dynamic changes connected with the development of modern information and communication technologies. The new media, omnipresent in the contemporary time and space, require the knowledge of the *"language of numerical data"* (Manovich, 2006, p. 82) and they must be an object of educational and scientific processes. The new media are the basic tool of professional activity of a large number of people and, more importantly, a tool of intellectual work for people employed at universities and various scientific institutions. In the context of contemporary media convergence, which in reality seems to be convergence of thoughts/thinking processes resulting from interpersonal relations / from social interactions between media users (Jenkins, 2007, p. 9), media education and upbringing for the media seem to be necessary. Media education appears to be the fundamental source for acquiring information technology competences and media competences in the contemporary world. A. Serdyński (2007, p. 43), while writing about a teacher's information and media competences (also including the academic teacher) distinguishes:

[1] **in the area of information science competences:**
    [a] *instrumental information technology competences and*
    [b] *directional information technology competences*, as well as

[2] **in the area of media competences:**
    [a] *theoretical media competences*,
    [b] *pedagogical media competences*,
    [c] *teaching media competences* and
    [d] *personal media competences*.

The aforementioned classification of the teacher's information technology and media competences became my inspiration for an attempt to present my own model of information technology and media competences necessary in the work and life of the contemporary academic teacher. Therefore, it can be assumed that an academic teacher (as an active member of information technology civilization) should posses:

[1] **basic information technology competences** i. e. *practical skills of using resources and information technology tools in everyday life* and, in particular, *in scientific activity/ professional work*

and

[2] **basic media competences** i. e. *theoretical knowledge on the influence of the media on the development of personality*, as well as *basic practical skills – in the area of operation of various contemporary media.*

In the area of an academic teacher's basic information technology competences, two spheres of competences can be distinguished:

[a] *technical information technology competences* and

[b] *professional information technology competences.*

Technical information competences of each contemporary European should be obligatorily developed as soon as possible, already during secondary school education and should (in my opinion) obligatorily include the following technical activities:

[a] *the ability to operate the Windows operating system* exploration of basic Windows applications, management of files and folders, Desktop configuration, installation and removal of programs;

[b] *the ability to operate the Word text editor* creating a document, changing the form (appearance) of the text in the document, changing the form (appearance) of the document, printing the document, presenting the information in the document in the form of tables and columns, inserting graphics (graphic materials) in the text in the document, creating charts;

[c] *the ability to search for information on the Internet* – exploration of the Internet network, looking for information using popular internet browsers – together with *the ability to use electronic mail*;

[d] *the ability to use available services in the information technology network;*

and

[e] *the ability to create presentations using applications which* are *made available with the ability to create graphics for presentations*;

[f] *the ability to design websites.*

Without the achievement of these **technical information technology competences** it is difficult to talk about an academic teacher as a member of *society of information*

technology era called *information society (Global Information society)*, which has recently come to be called: *information and knowledge society*. These concerns are confirmed by data contained in the EuroStat report published in 2005 (Reis, za: Chmielarz, 2007, p. 280) indicating a clear distance of European Union citizens towards relations with public administration through the e-government system, as, for example – only 18.0% of Danish people used basic administrative (public) services through the e-government system, and this percentage percentage was even lower in other countries – for example, it amounted to 17.0% of all inhabitants in Spain, 16.0%, in Austria, 14.0% in Finland, 14.0% in Sweden, 11.0% in Germany and, finally 5.0% in Great Britain. It seems very likely, however, that these data primarily present a lack of these technical information technology competences in a majority of European Union citizens who completed their education in the last century.

While writing about data from the EuroStat, I am aware that this distance of European Union citizens to relations of citizens with public administration through the e-government system may result from sociocultural attitudes which currently predominate in European society, resulting from the existing "traditional" knowledge, ideology, hierarchy of values and, primarily, both existing social customs and lack of knowledge in experience in information culture. Data concerning this knowledge and experience in intellectual elites would be interesting. Now, however, I would like to return to the problems of professional information competences.

    Professional information technology competences include various information technology activities, which mostly depend on the character/type of professional activity of a given person, as competences required in the *e-commerce* sector differ from those needed in *e-learning* or e-medicine. It should be emphasized that currently the **professional ability to design websites** nearly in all industrial branches and in service sectors leaves a lot to be desired and must often be unambiguously evaluated as: *unsatisfactory*. One could quote here various examples exposing to ridicule authors of fashionable presentations (also among intellectual elites) which contain diverse blatant errors, as well as the authors of numerous other *websites*, who present their product only for marketing purposes, as well as authors of commercials and information at websites of numerous institutions (also scientific ones) which create these *websites* in an unprofessional manner.

    Professional information technology competences must include not only: [a] *the ability to create presentations using available applications together with the skill of creating graphics to be used in such a presentation*, [b] *the ability to design websites*, but also [c] *proficient and correct knowledge of grammar* (and in particular *spelling*) *of one's native language* and [d] *broad professional knowledge concerning the professional object*. Unfortunately, today **professional competences** are nearly only those which ensure a high profit. Also, professional information technology competences seem to be profit-

oriented. Despite these "drawbacks", we are now aware that both the development of public electronic administration systems, as well as the development of systems strengthening e-business in the contemporary world, are irreversible phenomena which unambiguously herald the era of *Information and Knowledge*, which will have its actual beginning only in the future.

The acquisition of *information competences* today, before the arrival of the *Information and Knowledge* era, the era of the "numerical data language", is certainly a condition for proper existence of a contemporary academic teacher in the world of common presence of the media. Information tools to be used for work by people in the contemporary time and space must be "transparent" for them. Moreover, both the process of creating information, and the process of receiving information, are complex intellectual activities and, as such, they require appropriate *information technology competences* in the intellectual and cultural aspect. Perhaps, it is worth thinking about the issue of distinguishing various types of these competences, such as children's information technology competences (Grochowalska, 2010), parents' information technology competences, teachers' information technology competences, academic teachers' information technology competences, tourist service employees' information technology competences, business employees' information technology competences, e-medicine information technology competences etc., and finally – information technology competences of the contemporary person.

Nowdays, everybody accepts civilization changes, however, in my opinion one should assess negatively the level of society's awareness in the area of the necessity of broadening knowledge and experience allowing for obtaining necessary information technology competences. Contemporary times require significant changes in the academic education system and they make academic teachers face new tasks and requirements of modern education. Teaching at the university level should take into account state-of-the-art tools of the teaching technology supporting the student's general development (Czaja-Chudyba, 2013) his/her information technology skills, as well as the formation of innovative and creative attitudes, preparing them to many new professional actions (including ICT). It should be remembered that student achievements largely depend on the quality of teaching, and namely, on the level of the teachers' work and on educational centres of a given university.

Referring to the authority of W. Chmielarz (2007)[1] – attention should be paid to the fact that socioculturural conditions for contemporary civilization changes now leading humanity to the birth of *Information and Knowledge Society* are not noticed frequently, and sometimes, they are neglected by the creators of virtual organizations, despite the fact that these virtual undertakings require significant changes at various levels in

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[1]   Prof. Witold Stefan Chmielarz is an academic teacher of long standing at the Faculty of Management, University of Warsaw, and the author of commonly known monographs: *Systemy elektronicznej bankowości*, Warszawa 2005 and: *Systemy biznesu elektronicznego*, Warszawa 2007.

human attitudes "*starting from qualifications, skills through* (…) *motivation to the way of thinking and perceiving the surrounding reality*" (2007, p. 297). On the other hand, the aforementioned changes in human attitudes, concerning a positive attitude towards the new media and towards the information technologies require both knowledge and experience.

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Evaluation of Primary Prevention of Risk Behaviour in Preschool Education Institutions from the Perspective of Teachers

Vladimíra Kocourková, Jana Kantorová, Anna Šafránková

Abstract

The contribution presents the issue of factors influencing the level of primary prevention of risk behaviour in preschool education institutions, perceived also within the dimensions of school climate. It further presents the outcomes of a survey focused on evaluation of the level of primary prevention of risk behaviour from the perspective of kindergarten teachers (mainly women teachers) in the Czech Republic.

Key words: primary prevention, risk behaviour, kindergarten, preschool education, school climate, needs, kindergarten woman teacher/man teacher

Abstrakt

Příspěvek se zabývá problematikou faktorů ovlivňujících úroveň primární prevence rizikového chování v institucích předškolního vzdělávání, která je vnímána také v rozměrech školního klimatu. Dále uvádí výsledky průzkumu zaměřeného na hodnocení úrovně primární prevence rizikového chování z pohledu učitelů mateřských škol (zejména žen – učitelek) v České republice.

Introduction

The following contribution pays general attention first to selected factors that are presumed to have influence on the level (quality) of primary prevention of risk behaviour in preschool education institutions, or namely kindergartens in the Czech Republic. It emphasizes the factor of teacher (woman teacher) and deals with teachers' evaluation of primary prevention of risk behavior at their workplaces. The issue of primary prevention in preschool education institutions has been dealt with for a long time, and the area of determining factors is perceived as very important. Now the project IGA_PdF_2014018 titled "Kindergarten School Climate Respecting the Needs of a Child as a Protective Factor of Primary Prevention of Risk Behaviour" is carried out; the discussed area is significantly reflected in it. The project data are collected by means of both the qualitative and quantitative research strategies. What is accentuated is kindergarten school climate and respect for the needs of children attending kindergartens; the personality of a teacher plays the key role in both the cases. We would like to present the issue not only in the framework of theoretical thinking but mainly from the viewpoint of the data of our realized project, not published so far; these have become one of the starting points of the current project.

1 Primary prevention of risk behaviour

Any conceivable intervention, in the sense starting with preventing something and early intervention to therapeutic intervention up to relapse prevention, can be called prevention. Primary, secondary and tertiary prevention is distinguished on the basic level in the contemporary practice. These terms were introduced by G. Caplan in his work "Principles of Preventive Psychiatry" (1964). The level of primary prevention is carried out within preschool education; i. e. the one that is focused on the entire population, without examining the level of danger. Primary prevention is divided into nonspecific and specific prevention. Specific prevention focuses its attention to particular groups of risk behaviour, tries to reduce the influence of risk factors in narrowly defined phenomena (e. g. aggressive behaviour). (Scheitenhauer, H., Hayer, T., Niebank, K., 2008) Nonspecific primary prevention is focused on general circumstances of the development of an individual's personality, including all activities supporting healthy life style and acquisition of positive social conduct by means of meaningful use and organization of spare time, e. g. hobbies, sports and spare time activities and other programmes leading

to compliance with certain social rules, healthy development of personality, responsibility for oneself and one's conduct. *(Metodické doporučení k primární prevenci rizikového chování u dětí, žáků a studentů ve školách a školských zařízeních, č.j. 21291/2010-28).* The dominant position at kindergarten is occupied by nonspecific prevention due to its character. (Kocourková, V., Šafránková, A., 2012)

Risk behaviour is understood as ways of uncertain conduct having the potential of harms relating to one's own life or environment (living conditions in society) (Raithel, J., 2011). Thus the risks for individuals (social, health, economic etc.) are increasing.

2 Presumed factors influencing the level of primary prevention of risk behaviour at kindergarten

Factors that can influence the level (qualitative side) of primary prevention of risk behaviour at kindergarten are of multidimensional character. Basically, it is possible to consider four main areas of agents; the common factor of these is school climate in its particular dimensions (see chart 1).

The *personal factors* include personalities of particular agents – internal school partners. An important role is played by the personality of a kindergarten teacher (temperament, character, duration of practice, gender). According to Bessoth (1989), the social dimension of school climate is determined by persons or groups of persons that are in direct or indirect contact with the school. The *psychosocial factors* include relationships among particular participants – internal and external school partners, team of teachers, quality of management, parents' participation etc. The quality of education is based on competences of a kindergarten teacher, the way of pedagogical thinking etc. According to Bessoth (1989), the social dimension of school climate is related to behaviour or patterns of behaviour of persons or groups of persons at school; also persons or groups of persons that are in direct or indirect contact with the school. According to our opinion, the *material factors* include both the generally social and political society reflected in the education process and namely the character and situation of the locality (village, town, excluded localities etc.). Further particularly the character of a school building (arrangement of furniture, size of the building and rooms) and the character of a kindergarten (e. g. arrangement of the furniture and its suitability for children; toys – quantity, selection). According to Bessoth (1989), the ecological dimension of school climate includes physical and material aspects of school. Only the level of organization of the running of a kindergarten will be mentioned in relation to *organization of a kindergarten*; we would like to emphasize not only organization of work in a class but also the number of children in a class. According to Bessoth (1989), the cultural dimension of school climate is determined by value patterns, norms, religion, expert competences and significance of all persons at school.

Chart 1
Selected factors that can influence the level of primary prevention of risk behaviour at kindergarten

- Personality of child
- Personality of teacher and head
- Personality of legal representative
- Personalities of other school employees
- Milieu dimension of school climate

Personal factors

Psychosocial factors

- Relationships among particular agents
- Efficient communication
- Respect for needs
- Targeted support of child's resilience
- Quality of education
- Social dimension of school climate

- Social environment
- Political situation
- Locality
- School building
- Kindergarten environment
- Ecological dimension of school climate

Material factors

Organizational factors

- Level of organization of kindergarten running
- Level of the School Educational Plan
- Existence of a prevention programme
- Realized concept (projects)
- Status of kindergarten
- Existence of support of external subjects
- Cultural dimension of school climate

[Reference: Smolíková, K. et al., 2004; Essa, E., 2011; IGA PdF_2012_047 "Pedagogical Aspects of Prevention and Resilience in the Preschool Educational Institution" (Kocourková, V. Šafránková, A., 2012); IGA_PdF_2014018 "Kindergarten School Climate Respecting the Needs of a Child as a Protective Factor of Primary Prevention of Risk Behavior" (Kocourková, V., Kantorová, J., Šafránková, A., 2014); Bessoth, R., 1989.]

All the factors are interconnected and blended. Nevertheless, what should be pointed out is the role of personal factors and psychosocial factors very closely related to them. It is namely the personality of a teacher that can actively intervene and change the prevailing majority of other conditions (factors), and thus it plays the key role. This is why the personality of a teacher is one of the "areas" of our surveys. The survey that is to be presented here was focused on teachers' evaluation of primary prevention of risk behaviour at schools (their own workplaces) what can reflect the level of the given prevention to a certain extent too.

3 Evaluation of primary prevention of risk behaviour from the perspective of kindergarten teachers – a survey

The survey, focused on evaluation of primary prevention of risk behaviour from the perspective of kindergarten teachers, was carried out at the end of 2012 and the beginning of 2013. It was part of the project IGA PdF_2012_047 "Pedagogical Aspects of Prevention and Resilience in the Preschool Educational Institution" (Kocourková, V. Šafránková, A.). The part that was carried out by means of quantitative design gave birth to a research tool consisting of typical questionnaire items, items of the scale type and Q-methodology. The entire research tool was transformed into the electronic form.

Some of the scale-type items (14 out of the total number of 38 items) were aimed at evaluation of the level of prevention of risk behaviour by kindergarten teachers (some could have the function of kindergarten head at the same time). The outcomes of this part are to be published here.

The research tool was distributed via email to kindergarten heads asking them to forward it to teachers of the kindergartens. Of course, this way influenced returnability of the questionnaires. The questionnaires were sent to 4,175 email addresses; unfortunately some of them turned out to be defunct. The total of 888 questionnaires were returned; still, some had to be rejected, and thus 868 questionnaires were used for further processing. It means returnability was only around 20%.

The respondents evaluated prevention of risk behaviour at their schools in the total of 14 items (5-point scales) of the questionnaire:
– Cooperation of the Pedagogical-Psychological Counselling Centre on the issues of prevention of risk behaviour is optimum at the kindergarten where you work.
– Communication with children's families regarding prevention of risk behaviour is optimum at the kindergarten where you work.
– The objective of prevention of risk behaviour is set absolutely specifically and in writing at the kindergarten where you work.
– The content of prevention of risk behaviour at the kindergarten where you work is based on a clearly and specifically defined objective.
– The methods of prevention of risk behaviour at the kindergarten where you work are based on a defined objective and content.
– Parents of all the children are at least once a month informed of activities of prevention of risk behaviour at the kindergarten where you work.
– Parents of all the children actively participate in prevention of risk behaviour at the kindergarten where you work.

- You implement prevention of risk behaviour into your teaching activities by intent.
- A targeted analysis of problems occurring in the particular locality is carried out at the kindergarten where you work.
- A targeted analysis of internal resources is carried out at the kindergarten where you work.
- Regular (at least once in six months) diagnostics of children's knowledge and abilities in relation to prevention of risk behaviour is carried out at the kindergarten where you work.
- Regular (at least once a year) evaluation of preventive influence based on the set specific objectives is carried out at the kindergarten where you work.
- A targeted analysis of children's needs is carried out at the kindergarten where you work.
- A targeted analysis of protective and risk factors influencing particular children in relation to prevention of risk behaviour is carried out at the kindergarten where you work.

Value 1 was for the best evaluation and value 5 the worst one in the used scales (I absolutely agree, I rather agree, I do not have a clear opinion, I rather disagree, I absolutely disagree). It is the average number of points given by the respondents in the said 14 scales that can be one of the indicators of the level of prevention of risk behaviour.

Hypothetically, a difference was presumed in evaluation of the level of prevention of risk behaviour depending on:
- the duration of the respondents' teaching practice,
- the region,
- the founder (state, private kindergarten),
- the school status (independent school, together with an elementary school),
- the school locality (town, village),
- the respondents' function in the kindergarten (head, teacher),
- the achieved level of education,
- the existence of a prevention programme,
- the size of the kindergarten (up to 50 children, over 50 children).

4 Outcomes of the survey

The duration of teaching practice

The respondents were divided into two categories according to the duration of their teaching practice: category 1 (practice up to 10 years), category 2 (practice over 10 years).

Table 1
Average evaluation of the level of prevention of risk behaviour vs. duration of the respondents' teaching practice (Px)

Duration of teaching practice	t-tests; grouped: Px: 1 = up to10; 2 = 11 and over (DATA___korig_trans) Group over 10 Group up to 10 years						
	Average over 10	Average up to 10	t	sv	p	Number of valid 2	Number of valid 1
Average evaluation of the level of prevention	2.21	2.46	−4.165	866	**0.000034**	711	157

A statistically significant difference (signification p = 0.000034) was confirmed between the groups of the respondents according to the duration of their practice. The group of respondents with the duration of practice over 10 years evaluated the level of prevention significantly better than the group of practice up to 10 years. It is possible to presume an influence of one's experience and its reflection in evaluation and maybe even implementation of primary prevention of risk behaviour.

Regions of the Czech Republic

Table 2
Average evaluation of the level of prevention in particular regions of the Czech Republic

Regions of the Czech Republic	Analytic table of descriptive statistics (DATA___korig_trans) N = 868		
	Average evaluation of the level of prevention	n	Standard deviation
Olomouc	2.23	158	0.724021
Hradec Králové	2.24	21	0.477354
Central Bohemian	2.20	28	0.584847
Central Bohemian	2.28	45	0.700417
Plzeň	2.21	83	0.652697
Capital of Prague	2.37	51	0.664377
South Moravian	2.21	101	0.639551
Liberec	2.24	67	0.713643
Moravian Silesian	2.32	30	0.772888

Regions of the Czech Republic	Analytic table of descriptive statistics (DATA___korig_trans) N = 868			
		Average evaluation of the level of prevention	n	Standard deviation
Vysočina		2.32	95	0.753546
Zlín		2.17	62	0.646772
Pardubice		2.26	70	0.631841
Karlovy Vary		2.377	31	0.652101
South Bohemian		2.29	26	0.717799
	∑	2.25	868	0.680369

Differences between the averages in particular regions of the Czech Republic were not statistically significant (signification p = 0.950245).

State/private kindergarten

Table 3
Average evaluation of the level of prevention of risk behaviour vs. state/private kindergarten

State/private kindergarten	t-tests; grouped: pol4 (DATA___korig_trans) Group state Group private						
	Average state	Average private	t	sv	p	Number of valid state	Number of valid private
Average evaluation of the level of prevention	2.25	2.50	−1.568	866	**0.1171**	849	19

No statistically significant difference was proved (signification p = 0.1171).

Independent kindergarten/kindergarten together with an elementary school

Table 4
Average evaluation of the level of prevention of risk behaviour vs. independent kindergarten/kindergarten together with an elementary school (pol5)

Independent/together with ES	t-tests; grouped: pol5 (DATA___korig_trans) Group independent Group together with ES						
	Average independent	Average together with ES	t	sv	p	Number of valid independent	Number of valid together with ES
Average evaluation of the level of prevention	2.23	2.30	−1.4901	866	**0.136548**	553	315

No statistically significant difference was proved (signification p = 0.136548).

School locality

Table 5

Average evaluation of the level of prevention of risk behaviour vs. village/town

School locality	t-tests; grouped: pol6 (DATA___korig_trans) Group town Group village						
	Average town	Average village	t	sv	p	Number of valid town	Number of valid village
Average evaluation of the level of prevention	2.24	2.28	−0.80494	866	**0.42107**	514	354

No statistically significant difference was proved (signification 0.42107).

Function at the kindergarten

Table 6

Average evaluation of the level of prevention of risk behaviour vs. (head + teacher)/teacher

(Head + teacher)/teacher	t-tests; grouped: pol7 (DATA___korig_trans) Group 1: head + teacher Group 2: teacher						
	Average head + teacher	Average teacher	t	sv	p	Number of valid head + teacher	Number of valid teacher
Average evaluation of the level of prevention	2.17	2.38	−4.08374	672	**0.000050**	301	373

A statistically significant difference was proved between evaluation of both the groups of respondents (signification p = 0.000050). The heads evaluated the level of prevention significantly better. Again, the influence of experience can be taken into consideration; still, it is possible to consider a pitfall when a kindergarten head tries to present the situation in a better light than in reality.

Achieved education

Table 7
Average evaluation of the level of prevention of risk behaviour vs. education corresponding with university/corresponding with higher education

Variable	t-tests; grouped: pol8 (DATA___korig_trans) Group 1: corrU Group 2: CORRhe						
	Average corrU	Average corrHE	t	sv	p	Number of valid corrU	Number of valid corrHE
Average evaluation of the level of prevention	2.28	2.28	0.004554	385	**0.996369**	332	55

No statistically significant difference was proved between evaluation by both the groups of respondents (signification p = 0.996369).

Table 8
Average evaluation of the level of prevention of risk behaviour vs. education corresponding with university/corresponding with secondary education

Variable	t-tests; grouped: pol8 (DATA___korig_trans) Group 1: corrU Group 2: corrSE						
	Average corrU	Average corrSE	t	sv	p	Number of valid corrU	Number of valid corrSE
Average evaluation of the level of prevention	2.28	2.22	1.259951	791	**0.208059**	332	461

No statistically significant difference was proved between evaluation by both the groups of respondents (signification p = 0.208059)

Table 9
Average evaluation of the level of prevention of risk behaviour vs. education corresponding with higher education/corresponding with secondary education

Variable	t-tests; grouped: pol8 (DATA___korig_trans) Group 1: corrHE Group 2: corrSE						
	Average corrHE	corrSE	t	sv	p	Number of valid corrHE	Number of valid corrSE
Average evaluation of the level of prevention	2.28	2.22	0.634222	514	**0.526218**	55	461

No statistically significant difference was proved between evaluation of both the groups of respondents (signification p = 0.526218)

Existence of a prevention programme

Table 10

Average evaluation of the level of prevention of risk behaviour vs. existence of a prevention programme

Prevention programme existing/not existing	t-tests; grouped: pol9 (DATA___korig_trans) Group not having elaborated a prevention programme Group having elaborated a prevention programme						
	Average not having	Average having	t	sv	p	Number of valid not having	Number of valid having
Average evaluation of the level of prevention	2.47	2.01	10.64832	866	**0.000000**	455	413

The existence of a statistically significant difference was proved between the groups (signification p < 0.0000001). Thus it is possible to say that teachers from schools where a prevention programme is elaborated evaluate the level of prevention of risk behaviour better. It is necessary to be aware of the fact that most schools that stated having elaborated a prevention programme are kindergartens running together with an elementary school. Independent kindergartens having a prevention programme are rather exceptions.

Size of the kindergarten

Table 11

Average evaluation of the level prevention of risk behaviour vs. size of the kindergarten

Size of the kindergarten	t-tests; grouped: Size_sch: 1=to 50; 2=over 50 (DATA___korig_trans) Group over 50 Group to 50						
	Average over 50	Average to 50	t	sv	p	Number of valid over 50	Number of valid to 50
Average evaluation of the level of prevention	2.25	2.25	0.049450	866	**0.960572**	529	339

No statistically significant difference was proved (signification p = 0.960572).

Conclusion

The presented contribution outlined possible factors influencing the level of primary prevention of risk behaviour while the personality of a teacher (woman teacher) was emphasized. It also dealt with teachers' evaluation of the current situation in the field of primary prevention at their own workplaces. The presented survey outcomes showed statistically significant differences in evaluation of primary prevention from the perspective of duration of the respondents' practice, the perspective of their functions in kindergartens and also the perspective of existence of a prevention programme at the schools; these are considered to be significant findings. The schools having elaborated an independent prevention programme evaluate prevention at the school better than the schools not having elaborated an independent prevention programme. It is possible to presume that it is caused by targeted and conscious activity in this area. Still, kindergartens have no duty to create an independent prevention programme. It is presumed that prevention of risk behaviour in kindergartens is carried out by means of quality elaboration and especially realization of school education programme based on the Framework Education Programme for preschool education.

Generally, it is possible to sum up that the issue of primary prevention of risk behaviour is still very topical, and its importance is rising. When taking account of the principles of primary prevention, namely its early beginning, it is necessary to pay attention to this issue within activities of preschool educations (specifically kindergartens), to support teachers' competencies in practice and to consciously work with all the factors that can influence the level of primary prevention at kindergartens. The issue is also topical not only from the viewpoint of practice but also from the viewpoint of theory and research (pedagogical research, or in combination with psychological research); the area of the factors influencing the level of prevention is only one of the partial options of research – the field of possible research is much wider from the general perspective and not sufficiently used from our perspective.

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Diagnostic Tests in Czech
for the Children of Immigrants
Attending Primary Schools

Kateřina Vodičková, Yvona Kostelecká

Abstract

Mastering the second language, Czech in our case, is crucial for children of migrants, so that among other things they can integrate into the education process. To adjust the language teaching to the pupils' needs, it is necessary to identify what language skills, or individual competences within the frame of the communicative competence, should be developed. For this purpose, a new diagnostic test for the lower graders and upper graders of primary schools was designed. Although it is not a high-stakes test, it is essential to ensure its validity, reliability, practicality as well as its positive impact on the teaching process, the pupils, their teachers and the society. This paper presents the diagnostic tool, documents the qualities of the measurement device and outlines its further development.

Key words: Common European Framework of Reference for Languages (CEFR), Czech for foreigners, diagnostic test, language testing, young learners

Abstrakt

Pro žáky-cizince je klíčové ovládnutí druhého jazyka, v našem případě češtiny, mimo jiné proto, aby se mohli začlenit do procesu vzdělávání. Aby bylo možné zacílit jazykovou výuku podle potřeb žáků, je nutné určit, které řečové dovednosti, resp. které dílčí

kompetence v rámci komunikační kompetence je záhodno rozvíjet. Za tímto účelem byl vyvinut diagnostický test pro 1. a 2. stupeň základních škol. Ačkoliv se nejedná o test tzv. vysoké důležitosti, je zásadní, aby se jednalo o nástroj validní, reliabilní a praktický, aby měl pozitivní vliv na výuku, na žáky-cizince, na jejich učitele i na společnost. V tomto článku diagnostický nástroj představujeme, dokládáme jeho kvality a nastiňujeme další vývoj testu.

Klíčová slova: čeština jako druhý jazyk, diagnostický test, jazykové testování, Společný evropský referenční rámec pro jazyky (SERRJ), žák-cizinec.

Introduction

The number of children who attend primary schools and whose language of schooling differs from their first language (L1) has been growing steadily in the Czech Republic as well as in most European countries.[1] This growth has increased the interest not only in second-language (L2) instruction for young learners[2]/children of immigrants, but, in the first place, in questions like what level of communicative competence they have in Czech, what their progress is in L2, and how their (not only language) integration could be assisted. Students with insufficient Czech language skills may suffer feelings of social isolation and be ostracised by others.

With the support of Czech Science Foundation (project entitled Integration of the children of non-nationals into the Czech elementary schools, registration number: 13-32373S), the diagnostic test for the lower graders and upper graders in Czech primary schools was designed to map the children of immigrants' knowledge of Czech first generally, second individually. The findings as for the general tendencies are presented in e. g. Kostelecká et al. (2014), Kostelecká and Jančařík (2014) and are not the subject of this paper. As for the individual outcomes, there was a general hope that thanks to these tests, it would be possible to measure the pupils' progress in L2, and that the results would help the pupils, the teachers and the school to identify the fields in which the pupils need further instruction.

This paper introduces a set of diagnostic tests for children of immigrants, documents the qualities of the tests and suggests further steps to be taken for improving the tests. Before describing the format of the tests in Part 3, diagnostic tests are defined and

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[1]   In 1985, there were as few as 37,000 foreign nationals dwelling on the territory of what is now the Czech Republic (approximately 0.36 % of the total population), whereas in 2009, foreign nationals made up more than 4 % of the total population. In the 2010/2011 academic year, 1.7 % children enrolled in primary and lower secondary schools were children of immigrants.

[2]   The term "young learners" in literature usually refers to children aged between 6 or 7 to about 12. Since it does not cover the ages of all children attending primary schools in the Czech Republic, the term "children of immigrants" is preferred in this paper.

characterised generally in Part 2. Part 4 deals with assuring the quality of the tests and Part 5 summarises steps to be taken to ensure further improvements of the diagnostic tests. Concluding remarks can be found in Part 6.

1 Diagnostic testing

Generally, diagnostic tests should guide teachers and/or schools and other institutions as well as pupils or students; the results of these tests are meant to help teachers and schools to adjust the instruction, provide learners with relevant feedback and indicate where they need to improve themselves and, ideally, suggest how this aim could be reached. A diagnostic test is thus seen as a test "which is used for the purpose of discovering a learner's specific strengths or weaknesses. The results may be used in making decisions on future training, learning or teaching." (ALTE 1998, p. 142) Similarly, Alderson, Clapham and Wall (1995, p. 12) state the purpose of diagnostic tests as "to identify those areas in which a student needs further help".

Despite the general consent on the purpose of diagnostic tests and the use of the results, their definitions vary. In literature, diagnostic tests are usually distinguished from other types of tests such as placement, progress, achievement, and proficiency tests. However, references to the common nature of diagnostic tests and especially placement or proficiency tests are not rare (cf. e.g. Davies et al., 1999, p. 43). Bachman (1990, p. 60) argues that "virtually any language test has some potential for providing diagnostic information". Alderson (1995, p. 12) clearly states that "achievement and proficiency tests are themselves frequently used … for diagnostic purposes". Bachman (1990, p. 60) points out that diagnostic tests may be either syllabus-based, which supports the aforementioned close relation to achievement tests, or theory-based.

Theory-based diagnostic tests tend to be proficiency tests if based on models of communicative language ability or communicative competence. Hughes (2003) also suggests that proficiency tests may serve as diagnostic tests, but it depends on the exact purpose of diagnosis. Likewise, Alderson, Clapham and Wall (1995, p. 12) claim that diagnostic tests "can be fairly general, and show, for example, whether a student needs particular help with one of the four main language skills". Furthermore, these "general", i.e. skill-based, tests offer the possibility of more detailed analysis of written and spoken performance and consequently enable the researchers to focus on the individual components of the linguistic competence (e.g. orthographical and grammatical competence) or on the specific phenomena (e.g. in pronunciation).

So what makes a test diagnostic rather than placement, achievement or proficiency? The answer seems to lie in the interpretation and use of the results in the first place. Alderson (2005, p. 10) emphasizes that there is a lack of guidance on designing the

diagnostic tests, their possible content, and underlying theoretical basis in literature. Nonetheless, he summarises the characteristics a diagnostic test should have or usually demonstrates. These include, among others, the ability to identify learners' strengths and weaknesses, leading to remediation in further instruction, making a detailed analysis and report possible, providing immediate results, being low-stakes.

2 Diagnostic tests for young learners in Czech

One of the first diagnostic tests focusing on language skills in Czech were developed and described in 2007 (Cvejnová et al. 2007). However, these tests were designed for adult learners. A suite of diagnostic tests for children of immigrants was developed in the course of 2010–2014. Using an existent placement, achievement or proficiency test was not considered appropriate, mainly for the following reasons: a) There is a lack of Czech language tests designed exclusively for young learners and, to our best knowledge, none for children of immigrants. b) Using syllabus-based achievement tests, even if they existed, would not take into account the fact that the children may have learned Czech from various sources or from no official teaching materials at all. There is no specific syllabus that has to be covered before the test and that should be covered afterwards. c) The proficiency test Czech Language Certificate Examination for Young Learners (CCE-A1 for Young Learners and CCE-A2 for Young Learners[3]) is first, subject to a fee; second, available only at A1 and A2 levels according to the Common European Framework of Reference for Languages (2001, hereafter CEFR); third, too time-consuming.

For these reasons, a pilot version of a tailor-made diagnostic test for primary schools was introduced in 2010. The test was decided to be a proficiency test as there is no syllabus the test can be related to. For this reason, there is also no grammar or vocabulary test although some information on the level of grammatical, lexical and other competencies can be inferred from the productive-skills subtests.

2.1 General overview of the diagnostic tests

Within the project no. 13-32373S of the Czech Science Foundation, two diagnostic tests were developed. One of them is aimed at lower graders. Taking in consideration the development of language skills in L1 and the cognitive development of the respondents, this test is designed for pupils attending the 3rd, 4th and 5th grades, which roughly corresponds to the ages from 8 to 11. It verifies the level of communicative competence within the language skills at A1 and A2 levels according to the CEFR. The other test is

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[3] http://ujop.cuni.cz/cce-mladez

aimed at upper graders, i. e. the age group between 12 and 16, and verifies the level of language skills at A1, A2 and B1 levels according to the CEFR.

When designing the test, the authors could not base the test directly on the CEFR and its descriptors, since these are defined for adult language users and they do not take into account the children's cognitive development and communicative situations they enter. Therefore the tests are founded on the documents based on the CEFR, namely the language portfolios – the diagnostic test for lower graders is based on the Portfolio for Learners Up to the Age of 11 Vacková et al., 2002), the one for upper graders is based on European Language Portfolio for Learners aged 11 to 15 (Perclová, 2010).

2.2 The format of the diagnostic test for lower graders

The lower-grader diagnostic test at A1 and A2 levels verifies all four language skills in four subtests: reading, listening, writing, and speaking. The pupils can gain the maximum of 15 points in each subtest per level (see Table 1).

Table 1
The format of the lower-grader diagnostic test

Level	Subtest	No. of tasks	No. of points	Time
A1	Listening	3	5 + 5 + 5	10 minutes
	Reading	3	5 + 5 + 5	12 minutes
	Writing	2	6 + 9	10 minutes
	Speaking	1	15	3 minutes
A2	Listening	3	5 + 5 + 5	15 minutes
	Reading	3	5 + 5 + 5	18 minutes
	Writing	2	6 + 9	15 minutes
	Speaking	1	15	5 minutes

2.3 The format of the diagnostic test for upper graders

The upper-grader diagnostic test verifies the level of communicative competence in four language skills at A1, A2 and B1 levels according to the CEFR. The format of the test corresponds to the format of the diagnostic test for lower graders (cf. Table 2) although the test techniques may vary and so does the time allotted to each subtest. It should be noted that there is only one task in the subtest Writing at A2 and at B1 level to eliminate the error rate caused by fatigue and reduced concentration.

Table 2

The format of the upper-grader diagnostic test

Level	Subtest	No. of tasks	No. of points	Time
A1	Listening	3	5 + 5 + 5	6 minutes
	Reading	3	5 + 5 + 5	10 minutes
	Writing	2	5 + 10	10 minutes
	Speaking	1	15	3 minutes
A2	Listening	3	5 + 5 + 5	9 minutes
	Reading	3	5 + 5 + 5	10 minutes
	Writing	1	15	10 minutes
	Speaking	1	15	4–5 minutes
B1	Listening	2	5 + 10	13 minutes
	Reading	3	5 + 5 + 5	15 minutes
	Writing	1	15	15 minutes
	Speaking	1	15	4–5 minutes

3 Qualities of the diagnostic tests

A number of guidelines is available that help the test designers build the validity argument. These include e. g. ALTE Minimum standards for establishing quality profiles[4] and EALTA Guidelines for good practice in language testing and assessment[5]. In this paper, we follow the ALTE Minimum standards to support the validity argument.

3.1 Test construction

As for the theoretical model, the test is based on the Bachman and Palmer (1996) framework of language ability, which is widely used in language assessment and at the same time it is a model used in assessing young learners by e. g. McKay (2008, p. 51). The model ensures that the language can be tested in communication, within four language skills, and that general language can be tested as well. The components of the model have been taken into account when designing the test, test specifications, and assessment criteria. The model is operationalized via test specifications that state what the pupils need to know in order to fulfil the given communication goals in a particular way and, thus, to reach a particular level of communicative competence in the examination.

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[4] http://www.alte.org/attachments/files/minimum_standards.pdf

[5] http://www.ealta.eu.org/documents/archive/guidelines/English.pdf

The test specifications are based on the aforementioned European Language Portfolios, thus ensuring the communicative goals, sub-skills, text types, domains, etc. correspond to the CEFR, or more precisely, to the documents based on the CEFR.[6] Although there is no need for a large number of test versions because of the purpose of the test (pupils take the test once in their live or they re-take the test after a longer time), the test versions are comparable regarding their content thanks to the detailed test specifications.

A team of test constructors was recruited among experienced test constructors and item writers working for the Institute for Language and Preparatory Studies, Charles University in Prague, who are familiar with teaching and/or testing young learners. For the reviews and revisions, an internal expert from Charles University was selected as well as some external reviewers who are experienced in language testing and/or teaching young learners.

3.2 Administration and logistics

No administration centres are needed, as the pupils sit the test in the primary school they attend. Since the numbers of pupils taking the test have not been vast, so far the test has been administered, the Speaking part examined, and all subtests rated by the test constructors. Thus, all training and benchmarking take rather the form of team consultations and meetings.

3.3 Marking and grading

All subtests are marked by the team of administrators/examiners. The Reading and Listening parts are corrected according to a key, which does not require any special training. Since the team is quite small and consists of test constructors, the training for raters of productive skills took a form of discussions and rating sample performances. Regarding the receptive and productive skills, random checks of the accuracy of marking are introduced.

3.4 Test analysis

The piloting phase took place throughout the year 2010 using the first version of the test. After revisions based on the results and experience from the piloting, pretesting took place under the same test conditions in 2013. To ensure that both the piloted and pretested population is the same as the intended test population, the piloting and

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[6] The external reviewers appreciated that the link to the external framework of reference was evident and the difficulty of the test corresponds to the levels of communicative competence.

pretesting were realised on a voluntary basis at a number of primary schools. Only the children with different L2 from Czech from 3rd to 9th grades were allowed to take the test if their parents approved.

When interpreting the results from the piloting stage, mainly qualitative analysis was used and interviews with some pretested participants were carried out. Quantitative analysis (item analysis) was used to calculate especially facility values and the discrimination index of the items. The analysed data was used to verify how well the tasks function. After revisions, pretesting was arranged.

For the test analysis, two different theories are used. One is the Classical Test Theory (Lord, Novick 1968; Crocker, Algina 1986), the other is the Item Response Theory, published by Rasch in 1960. For the data from pretesting, we used statistical software Iteman 4.1 based on the Classical Test Theory for both diagnostic tests. In the case of lower-grader diagnostic test comprising A1 and A2 levels, Reading and Listening at both levels and the first A1 task in Writing were analysed. The test was taken by 129 respondents. In the case of the upper-grader diagnostic test comprising A1, A2 and B1 levels, Reading and Listening at all levels and the first A1 task in Writing were analysed. The test was taken by 132 respondents.

3.4.1 Reliability of the diagnostic tests

Řehák (1998) understands reliability as the accuracy of measuring the characteristics we measure in reality and Kreidl (2004) defines it as the accuracy, consistency of measurement, i. e. the ability to reach the same result of measurement in case the state of the observed object has not change. Similarly, Chráska (2007) states that a test holds high reliability if the results are trustworthy and accurate. In his opinion, results are trustworthy if the same or very similar values are acquired under constant test conditions and accurate if the influence of errors on the results is minimised.

Test reliability cannot be measured accurately; it is only estimated and reported through the reliability coefficient in practice. The closer the coefficient comes to +1, the more accurate and reliable the test is (Schindler, 2006).

Nonetheless, Soukup (2005) adds that reliability of a test should be interpreted with caution as it depends on the number of the items. The more items, even if useless, appear in the test, the higher value of the reliability coefficient. Chráska (2007) claims that generally, a reliability coefficient of 0.8 and above is considered optimal and 0.95 even excellent for didactic tests.

Reliability of a test can be estimated in two ways – by parallel measurements (Test-Retest method, Parallel-Forms method) or by internal consistency (splitting the test in two halves and estimating the internal consistency). For the Test-Retest method, it is necessary to re-take the test after a certain period of time. This method was considered unfeasible in the case of the aforementioned diagnostic tests. Using parallel tests was

not considered practical either, as there would have to be two parallel versions of the test and pupils would have to take both of them.

The most frequently used method of estimating reliability is the internal consistency method which can be applied only in test with homogenous content. This method presupposes that the answers to all items measuring the same characteristics hold sufficiently high positive correlation. For calculating the inner consistency of a test, Cronbach's alpha (Cronbach 1951) is probably the most widely used formula:

$$\alpha = \frac{k}{k-1} \left[1 - \frac{\sum \sigma_i^2}{\sigma_t^2} \right]$$

where *k* is the number of items, σ_i^2 is the variance of component *i* for the current sample of respondents and the σ_t^2 is the variance of the observed total test scores. Cronbach's alpha comes from Kuder-Richardson method (Kuder, Richardson 1937), or more precisely from Kuder-Richardson Formula 20 (KR-20); it made it possible to estimate reliability for multiple choice items as well. Kuder-Richardson method can be seen as a specific case of Cronbach's alpha; it is used for dichotomous items and the reliability coefficient is calculated from the following formula:

$$\alpha = \frac{k}{k-1} \left[1 - \frac{\sum p_i q_i}{\sigma_t^2} \right]$$

where *k* is the number of items, p_i is the proportion of correct responses to test item *i*, $q_i = 1 - p_i$ is the proportion of incorrect responses to test item *i* and σ_t^2 is the variance of the observed total test scores.

Another method used for estimating reliability of a test is the Split-Half method. Chráska (2007) considers this method appropriate for a test with items ordered according to their difficulty from the easiest ones to the most difficult ones. This method presupposes that if the test is reliable, its parts, namely two halves, must be reliable, too. These halves are assessed separately and then the results are correlated. The correlation between the two halves is corrected by Spearman-Braun Formula (Chráska 2007):

$$r_{ab} = \frac{2r_p}{1 + r_p}$$

where r_{ab} is the reliability coefficient and r_p is the reliability coefficient between the results of both halves of the test.

Table 3 shows the reliability coefficients gained by applying Kuder-Richardson Formula in the lower-grader test as a whole as well as in its two parts. On top of that, it also shows the reliability coefficient gained by the Split Half method in three variants of halving the set: Split-Half Random (items are split into halves at random), Split Half First-Last (one set consists of the first half of the items, the other set of the second half), and Split Half Odd Even (one set comprises the odd items, the other one the even items).

For all variants of splitting, results are shown for both non-corrected variant and the variant corrected by Spearman-Braun Formula. This correction is used because in the non-corrected version we compare two tests with only half of the items that the live test has. Standard error of measurement (SEM), which estimates the standard deviation of the errors of measurement in the scale scores, is reported, too.

Table 3
Reliability coefficients for the lower-grader diagnostic test

	Alfa (KR-20)	SEM	Non-corrected			Spearman-Braun Correction		
			Split-Half (Random)	Split-Half (First-Last)	Split-Half (Odd-Even)	Split-Half (Random)	Split-Half (First-Last)	Split-Half (Odd-Even)
Whole test	0.951	2.180	0.921	0.796	0.919	0.959	0.886	0.958
A1 test	0.915	1.373	0.844	0.755	0.878	0.915	0.860	0.935
A2 test	0.915	1.663	0.804	0.794	0.867	0.891	0.885	0.929

The data in Table 3 show that when applying the Kuder-Richards formula, the reliability coefficient exceeds 0.9 for the individual tests and reaches even 0.95 for the whole test. Slightly lower reliability coefficients occur when using the split-half method. However, it should be noted that splitting a diagnostic test in two equivalent halves is complicated. Since the tasks and items are ordered according to their difficulty, we get the lowest reliability coefficient when comparing the first and the second half of items (Split-Half First-Last Method). The reliability coefficient is considerably higher when the Random or Odd-Even variant of the Split-Half method is used. In these cases, it almost always exceeds 0.9.

Similarly to Table 3, Table 4 shows the same test characteristics for the upper-grader diagnostic test.

Table 4
Reliability coefficients for the upper-grader diagnostic test

	Alfa (KR-20)	SEM	Non-corrected			Spearman-Braun Correction		
			Split-Half (Random)	Split-Half (First-Last)	Split-Half (Odd-Even)	Split-Half (Random)	Split-Half (First-Last)	Split-Half (Odd-Even)
Whole test	0.971	2.523	0.904	0.798	0.952	0.949	0.888	0.976
A1 test	0.920	1.319	0.825	0.697	0.878	0.904	0.821	0.935
A2 test	0.944	1.190	0.898	0.769	0.921	0.946	0.869	0.959
B1 test	0.934	1.663	0.881	0.805	0.885	0.937	0.892	0.939

In this case, when Kuder-Richardson Formula is applied the reliability coefficients are even higher than in the case of the lower-grader test. High values of reliability coefficient are gained also when using the Split-Half method.

3.4.2 Difficulty and discrimination

Another characteristics used for judging the tasks and items is the item difficulty and discrimination. It is generally agreed that the items of a didactic test should be neither too difficult nor too easy. The value of the difficulty index is between 0 and 1. Items with $P < 0.3$ are considered very difficult, whereas items with $P > 0.89$ are easy and, consequently, have low discrimination index.

According to Chráska (2007), discrimination refers to the ability of the test to distinguish between test takers that are more competent and less competent. The discrimination index is calculated in a number of ways and can acquire values from -1 to $+1$. The higher the discrimination index, the better the test distinguishes test takers with higher knowledge from test takers with lesser knowledge. In accordance to Ebel (1954), the discrimination index over 0.2 is generally considered sufficient. For the analysis of the diagnostic tests, the point-biserial coefficient (Rpbis) was used. The advantage is that Rpbis takes into account the difficulty of the item (Bílek, Jeřábek, 2010).

The values of the difficulty index and discrimination index can be found in Tables 5 and 6.

Table 5
Characteristics of the lower-grader diagnostic test

	No. of items	Average raw score	Standard deviation	Minimum score	Maximum score	Mean P Difficulty index	Mean Rpbis Discrimination
Whole test	72	64.419	9.887	7	72	0.895	0.498
A1 test	36	33.093	4.721	7	36	0.919	0.480
A2 test	36	31.326	5.707	0	36	0.870	0.517

The item analysis of the diagnostic test for lower graders shows that the average difficulty of items in both parts is relatively low (the average difficulty index is higher than 0.8 in both parts). Nonetheless, A1 test is easier than A2 test, which is positive, because within a diagnostic test, we expect that the higher the level of the test, the more difficult the test. At the same time, relatively low difficulty does not matter to a larger extent within a diagnostic test if the discrimination values are reasonably high. The whole test as well as the tests at both levels have a rather high discrimination – Rpbis is exceeding 0.45. For this reason, we believe the lower difficulty of the test is acceptable.

Table 6

Characteristics of the upper-grader diagnostic test

	No. of items	Average raw score	Standard deviation	Minimum score	Maximum score	Mean P Difficulty index	Mean Rpbis Discrimination
Whole test	95	80.598	14.777	0	91	0.848	0.532
A1 test	35	29.348	4.664	0	32	0.839	0.460
A2 test	30	26.424	5.016	0	29	0.881	0.595
B1 test	30	24.826	6.484	0	30	0.828	0.552

The results for the diagnostic test for upper graders are similar although the average value of difficulty index is slightly lower than in the test for lower graders. The discrimination index within all three parts of the test (A1, A2, B1) is again high.

4 Further steps

Part 4 shows not only what has been done in diagnostic testing within this project, but it also identifies fields in which further development is desirable.

First, it will be necessary to train the administrators, examiners and possibly also raters if the numbers of test takers grow. In the piloting and pretesting phase, these roles could have been handled by the team of test constructors since the number of test takers was relatively low. If the test is used on the national level (although probably voluntarily), more staff will be required to participate in test administration, examination and assessment. In diagnostic testing, prompt and detailed feedback both to test takers and teachers or schools is crucial. With growing numbers of test takers, it may be also necessary to train a number of experts in providing feedback to the test users.

Second, the team may need to focus on adapting the test to test takers with special needs.

Third, organising a standard setting in order to set the cut-off score may be useful. Although to our best knowledge, the number of even high-stakes tests in Czech that have gone through standard setting when establishing the cut-off score is extremely limited and in most cases, if not all, the cut-off score has not been implemented yet, running such a procedure would increase the quality of the test. On the other hand, it should be noted that the nature of the test makes a detailed report of e. g. subskills possible, which is probably more desirable than reporting a mere number or pass/fail result.

Fourth, some spoken and written performances could be double marked. This would allow for tracing the inter-rater reliability. Double marking would be important especially when the number of raters increases since it can help the test constructors

identify inconsistent raters, but also those that are too harsh or too lenient. Based on the findings, some raters may need to be re-trained and/or supervised.

Concluding remarks

The educational integration of students who are not native speakers of Czech is a subject that, given the rapid increase in immigration to the Czech Republic in the past twenty years, is a very relevant issue today. Since the number of immigrants in the Czech population is likely to grow even more, its relevance will only increase in the future.

The diagnostic test for lower graders and upper graders at Czech primary schools whose L1 is different from the language of instruction represents one of the first attempts to design an instrument that would help teachers, schools, and children of migrants with (language) integration. The paper presents the qualities of the test as well as areas that require further development.

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Muslim Children in Czech Schools

Pavel Kliment, Jaroslav Šotola

Abstract

The goal of our empirical study is to present the experience of primary school peda-gogues, which they gained from contact with Muslim children (and their parents), who can be perceived as specific participants in the educational process. In order to meet our goal, we chose a qualitative method; for data collection, we applied the method of semi-structured interview. The interviews were conducted with pedagogues at schools that have long-term experiences of educating Muslim children. The paper depicts the expectations of the major players acting in the pedagogical interaction, relating to the forms and course of the pedagogical process. It deals mainly with the expectations of Muslim children, their parents and an educational institution as a whole. The expecta-tions differ in many aspects, bringing about the necessity of negotiating and accepting dissimilarity. The paper results in partial recommendations for responding to other examples of growing diversity in Czech schools in order to maintain the cooperative character of the pedagogical interaction.

Key words: Muslim pupils, approaches to Muslim pupils

Introduction –
Muslims in the territory of the Czech Republic

The number of Muslims living in the Czech Republic is estimated. According to the 2001 census, 3,699 people claimed allegiance to Islam and indirectly to being a Muslim; in 2011, the number was 3,358 (Census Regarding People and Housing, 2011). The number

probably does not reflect reality, as the answers concerning the declared religion were of an optional character, and many respondents probably did not answer this question. Sáňka, the chairman of the Muslim Community in Prague (Muslimská obec v Praze), estimates there are about ten to twenty thousand Muslims living in the Czech Republic (Břešťan, 2006). In his estimation, Topinka reached the number of 11,235 Muslims (Topinka, 2007, p. 48). If we were to use this information, Muslims constitute only 0.1% of the population.

Despite the low number, the public as well as media pay close attention to Muslims and followers of Islam. There may be several reasons for this. Primarily, possible migration waves are anticipated, which could occur, for instance, as a result of wars, disorders, political and religious repressions, and which could involve Muslims. An important role can also be played by the fact that some Muslims are easily identifiable, for example, on the basis of their clothes, eating habits or religious rites, when such dissimilarity in itself attracts attention and arouses interest. The increased interest may come also from the stereotypical image of a Muslim, which has survived in our society; Muslims and Islam as such arouse associations of possible danger.

Surprisingly, little attention is paid to Muslims and followers of Islam in social-scientific disciplines, which this paper will partially try to rectify. It contains experiences of pedagogues, who, within the teaching process, are or were in contact with Muslim children and, eventually, with some of their parents. We focused on the registration of unusual behaviour of Muslim children and their parents, which had been perceived as the demonstration of the different cultural and religious affiliation. Such behaviour may induce expectations of studied players concerning the forms and course of the teaching process. The findings may be then used by pedagogues acting in similar situations, focusing on creating and maintaining a cooperative character of pedagogical interactions and on avoiding any conflicts.

1 Islam, its pluralist displays and pedagogical practice

We cannot predict if the vision about the growing number of Muslims in our territory will come true. However, it can be expected that the increased mobility within the European area may cause that Muslim students will appear in any school in the Czech Republic. It is desirable to have a proactive tool for interpreting some behavioural peculiarities of the studied students, as well as recommendations related to procedures in such specific situations.

There are various forms of Islam, which are given by the different ethnic and cultural affiliation, historical context, initial family situation, which influences the real forms of orthopraxy. As Ramadan puts it, there is only one Islam with regard to its sources; however, there are several ways of its legal application, and the following ways

of concretisation in a given time and place tend to vary (Ramadan, 2000, p. 85). In many cases, during the research, we came across a statement that a vast majority of Muslims do not differ from an individual belonging to the majority of the population. Those individuals could constitute one point of an imaginary scale of orthopraxy; the second point would be delimited by individuals professing Islam in its orthodox forms, whose everyday life is then significantly determined by the belief. The behaviour of Muslims is very variable, often much more variable than that of the members of the greater society.

Surveys conducted in Great Britain show that education is the most important topic of public politics for Muslims (Fetzer, Soper, 2005, p. 38). The aforesaid is given primarily by the role of education for increasing the potential of social mobility. Placing children in secular schools also raises fears that these schools could jeopardise the value system of the young generation based on Islam (Topinka, 2007, p. 7). The collision potential will consist in the contradiction between the expectations of Muslim children and their parents and the school reality of the host country. In this context, an important role is played by the educational process, which their parents as well as their children had gone through in the past.

2 Research methodology

To achieve the goal, we selected a qualitative methodology, which is suitable for detecting unexplored and rather rare cases. According to Kostelecká, the number of empirical studies concerning the involvement of students with a foreign mother tongue to our educational process is limited (Kostelecká et al., 2013, p. 9). The data were collected in the form of semi-structured interviews with pedagogues. The schools were selected in the form of a special-purpose selection; we focused on those institutions, which had some experience with the described segment of students. We chose two ways. In the first case, we addressed pedagogues in schools, which are located in places, where asylum facilities for applicants for international protection exist, and where children of asylum seekers attended one of those schools. In the second case, on the basis of a study of expert references as well as annual reports, we identified schools, which dealt with the education of foreigners, including Muslim children, within their curriculum. In total, nine interviews were conducted with 13 pedagogues from six schools, including headmasters/headmistresses and their deputies, as well as regular teachers with various types of pedagogical experience.

Initially, the conversation partners were afraid if they had enough transmittable experiences; they often pointed out to the fact that the religion was not reflected noticeably in the behaviour of most of the Muslim pupils. However, during more detailed conversations, various aspects of the presence of the difference of these children in our educational system were becoming evident. The interviews were conducted on

the basis of a general framework. First of all, we focused on the definition of the differences between a Muslim pupil and the rest of the students, then on his/her adaptation to the new environment. We also paid attention to the role of parents of such students in the studied processes. Topics studied in countries with greater experience with Muslim pupils (e. g. Understanding, 2004) were inspiring. We were continuously working with the transcribed interviews in the form of open coding, we inserted notes, focusing mainly on the emerging categories showing the regularities or discrepancies in the pedagogical experience. The following text has been structured according to the analysed categories.

The studied schools vary both in terms of geographical distance and size. However, they all have a long-term increased number of students-foreigners in common. In all cases, the management encouraged pedagogues to change the style of teaching, communication with parents and work with the class towards openness to students from a different environment. Although the experience was not directly the main topic of the interviews, it was a kind of main thread: it can be expressed as the transformation of a school in terms of daily operations as well as cognition of the partakers. The addressed schools do not represent an ordinary segment of primary schools in the Czech Republic, and can be, through their experience, inspiring for other pedagogues, who will be confronted with students from a culturally different environment. Many conversation partners were aware of this fact, and their statements had the character of the presentation of results achieved by their home institution, which may serve as a good example. From the methodological point of view, keep in mind that the studied experiences contain self-stylisation components. However, this is acceptable because we do not primarily focus on the *fact* of integration and adaptation of students from a different environment in Czech schools, but on its *social construction* and *representation* in the conception of teachers.

Like Muslims, Muslim pupils do not constitute a compact group either. The addressed pedagogues know this very well; in order to identify a child, not only the religious key, but frequently also the ethnicity or the country of origin was applied. In the interviews, children of refugees or migrants, who had come to the Czech Republic and had undergone the adaptation process, were mentioned unilaterally. Descendants of the second, third generation of migrants were completely omitted, although, for instance, in Germany, it is a hot topic, which is reflected in public discussion (e. g. Faas, 2010, p. 68). Families of converts to Islam were also omitted.

3 Identification of differences on the part of Muslim pupils

Muslim pupils are primarily perceived as foreigners. The Islam origin was not described as important as the language difference. Language teaching was found to be crucial; other studies draw the same conclusions (e. g. Vojtíšková, 2012). The language barrier was an obstacle not only to the education process as such, but also to identification of the specific needs of Muslim pupils. Initially, individual prointegration measures were sought rather intuitively. Commonly used tools included tutoring, interpreting, creating individual study plans, or placing students in lower classes.

Dissimilarity appears not only in the form of a different language, but also in many cultural aspects, which our school system considers a matter of course and which are used as the basis ("They are not familiar with common trees, such as spruce, our animals, it is all new for them, they know many kinds of date palms").

A high migration rate is another factor that is typical for Muslim pupils, especially asylum seekers. Children often leave without prior notice, which contributes to the frustration of those, who participated in the process of teaching these students; thus, they are unable to see any impact of their activities. Sometimes, students are under supervision of immigration police, who ask about the school attendance of students; a social services department can play a similar disciplinary role.

The fact that many Muslim pupils are wedded to Islam is often overshadowed. This applies mainly in a situation when the religion is not manifested by a student in any way and that individual tries to fit into the ethnically homogeneous group. The pedagogues did not tend to perceive a Muslim as a stereotype, they emphasised individuality of each student and they sometimes even resisted using the designation of a "Muslim pupil," which is used in our research.

Boys were perceived by the pedagogues as more assertive, with a sovereign position in a family, which sometimes allegedly led to refusal of a woman teacher as an authority. The characteristics of girls were rather related to the level of orthodoxy as understood in the family. While the girls, who did not wear a headscarf, did not differ much, and were sometimes perceived as "assiduous," girls wearing a headscarf were seen as reclusive, not engaging in school life. The last aspect mentioned in the interviews was the level of interest in education, when the source of motivation towards education was sought in the system of values established in a family. The fact of how long the family wanted to stay in our country was important as well.

3.1 Assimilation and accommodation as an outcome of negotiations

Assimilation and accommodation processes can be seen on various levels of life (Piaget, 1999, p. 20). In order to define changes, we have chosen a teacher's point of view. We understand accommodation as processes, in which the academic environment changes a pedagogue and transforms his/her sociocultural patterns related to variability in students' behaviour. Assimilation is understood as processes, in which a pedagogue requires adherence to defined rules. The real process of the pedagogic activity will have a form of compromise; within adaptation processes, both the accommodation and assimilation processes can be seen.

Accommodation and assimilation changes do not take place as a jump shift; they result from many communication transactions between participants in a pedagogic situation. A teacher registers the expectations of partakers, thinks about the arguments used, comparing them with his/her experience and putting them in the real conditions of the academic environment. It results in supplementing the existing knowledge, a shift in attitude and modification of pedagogical strategies. With regard to the interpretation perspective, the accommodation processes outnumber the assimilation ones in the pedagogue' statements, which is similar to, for instance, the British experience (Fetzer, Soper, 2005, p. 42). Their dynamic balance would be more evident within the interviewing of Muslim pupils or their parents.

Negotiations take place on several levels at a time. Close attention was paid to wearing of headscarves. All school facilities expressed a tolerant attitude to this issue; wearing a headscarf was perceived as an immanent expression of belief, which should not be forbidden. In addition, the issue of wearing a headscarf was included in academic discussions in order to make fellow students respect this peculiarity ("…a teacher noticed someone had been laughing, so she discussed it with the children …"). Not all girls wear headscarves; veiling occurs at various ages; parents do not have to be necessarily followed ("…as soon as she reached eighteen, she started to veil herself, her mother does not wear a headscarf …").

Requirements concerning the eating habits of Muslim children were mentioned only rarely by the pedagogues. Muslim children usually brought their food from home. Problems related to eating at school events, such as trips or ski courses did not occur either, because Muslim parents did not let their children go, referring to the financial demands of such events.

Parents of Muslim children did not even require any special reliefs for their children during the Ramadan (fasting month), when children, especially at the second stage of elementary education (aged 10–15) also fasted. Such parents rarely informed teachers about fasting. At the end of the fasting month, Muslim parents often let their children stay at home with an excuse that they wished to celebrate this important religious

holiday with their family. The aforesaid wish was fully respected by the school facilities ("It is the same as if you forbade our kids to celebrate Christmas").

Minor requirements concerned physical education. In a few cases, girls also insisted on wearing a headscarf during those lessons, which was perceived as a safety risk (a risk of a headscarf snagging on gym equipment). This fact had been discussed with their parents, who instructed their children on what headscarves they should wear and how they should be tied. Despite that, they did not carry out some sports activities. Some Muslim children refused to change their clothes in front of the others, even in front of schoolmates of the same sex. Sometimes, this was solved by enabling them to change their clothes in a separate room, on other occasions, the children came to school already wearing sporting clothes; if they asked to be excluded from physical exercises, they were assigned alternative activities. They entirely refused to take part in swimming courses, which was solved again by alternative activities ("…I cannot imagine that I would force them to participate, we are a school, which teaches tolerance …").

The highest tension was caused by requirements of Muslims related to art and music lessons. It applied mainly to those parents and children, who had been here for a short period of time and they had little experience with such subjects. Parents tended to push through repeatedly and strongly that their children should be excluded from such subjects, referring to inconsistency with their belief. Teachers chose to negotiate regarding the character of teaching; parents were invited to attend a lesson. During art lessons, Muslim children were assigned non-figural themes or alternative procedures: "We also painted a man, we painted a figure in order to described individual parts, and the children said they could not do that, so we suggested cutting it out, and they agreed." While singing, these children got tasks from music theory without necessarily having to participate in signing. "There was a request not to sing. The child attended music lessons, did not sing, learnt theory and songs as poems." This was accepted both by parents of Muslim children and by the children themselves without any significant problems.

3.2 Parents

Communication with parents of children with special educational needs is perceived as very important. It enables pedagogues to understand the background of a child; for parents, it represents an opportunity to become familiar with normative requirements of the institution. In many cases, the addressed teachers described the communication with parents of Muslim pupils as problematic for several reasons. The language barrier, which prevented smooth communication, was present again. Older children of parents or even the students themselves, which was perceived as an extreme and inappropriate alternative, were often used as interpreters. Much communication issues was brought by telephone and written communication. Parents often avoided

contact with the school. They also tended to trivialize educational problems of their children; they generally hid existing problems of both the students and their family, if such problems affected the teaching process. The differences in educational problems of our country and their home country led to the necessity to also explain the apparently natural things related to the rules of excusing or the fact that excursions were not voluntary but were a part of education. Mutual misunderstanding can also result from the fact that parents come from an environment, where it is normal that children do not sing at schools; therefore, they do not breach the religious taboo. The highest tension was caused by the unconditional requests. The abovementioned pressure grew in a situation, when a teacher was addressed by several parents of the Muslim children.

4 Diversity as a "problem"

If we concentrate directly on the process of teaching a Muslim pupil, we have identified three basic levels, on which we can study and identify factors influencing its form and results.

1. School; a school as a broader reference group.
2. Class interaction; a class as a small social group (mutual interactions being affected by other players – parents).
3. Teacher; a teacher as a key player determining the group dynamics.

As for the **school level**, it is the overall approach of the institution to diversity. It can vary from absolute rejection to systematic acceptance. The institutional background then determines the rate of supporting or non-supporting inclusive activities towards students from a different environment, who do not speak Czech and do not know our life and institutions. The occurrence of Muslim pupils was initially perceived as interference in the established system; in the studied schools, the situation was improving, teachers were positively motivated and the presence of dissimilarity started to be understood as an enriching element. Obviously, this level can be influenced only partially by a regular pedagogue.

On the **level of a class**, we identified three basic types of relationships directly involving the teacher: relationship with a particular student, his/her parents as well as the whole class. However, these are not the only determining relations. All players and their mutual relationships are represented in the following chart.

<div align="center">
TEACHER
PARENT
STUDENT
CLASSMATES
</div>

In relation to a new student from a different cultural environment, available means for supporting and integrating him/her must be used, primarily in the form of improving his/her language skills in speaking Czech. Based on their experience, all the respondents agreed upon this fact. However, one should keep in mind that improving language skills should not overshadow all other aspects of integration, which are based on the cultural and religious dissimilarity possibly leading to rejection e. g. by classmates. The question is how should these important attributes of inclusion be treated? According to one of the pedagogues, it would be ideal to approach "a child as an individual, not taking into account what religion he or she belongs to, what skin colour he or she has." To a certain extent, this is paradoxical, because it is also good to know the cultural model of the environment of the country and the family, which determines the new student. The solution is to avoid too much emphasis on the dissimilarity because it could lead to exclusion; at the same time, a pedagogue should be familiar with the student's background, which often explains some peculiarities in his/her behaviour.

A pedagogue often encounters a rootless child, groping in the dark. Existing research shows that parents are often unable to give them advice because they cannot interpret the problem satisfactorily (Nielsen, 2004, p. 118). A Muslim pupil finds himself/herself in an extremely disadvantageous situation, which, in fact, has no optimum solution, always being more or less stressful. According to British authors, Muslim children have to face considerable enculturation pressure at school, which is not recognisable by the players – teachers and schoolmates (Ramadan, 2005, p. 126). In principle, such a student has three options how to respond in those situations. If there are several Muslim children in a class, that student may become withdrawn and refuse the influences of the host society. Another variant is the selection of a certain ambivalence; children participate in the culturally affected curriculum of the school, still remaining faithful to their principles. The last variant is the acceptance of the enculturation pressure by that student in order to integrate with the class, even despite explicit bans from parents, who, however, do not have to know about it.

In communication with parents from a different cultural environment, one should find a way and level of explaining our local specifics and "game rules," including ordinary natural things. One should not shrink from vigorous communication strategies applied by parents. Usually, it is more appropriate to prefer individual consultations; it is purposeful to avoid telephone and written communication. In case of high-pressure behaviour, it is suitable to anticipate long-term negotiations. One should also communicate in situations when the family as such does not signal this willingness; any further communication must be continuously offered at all times.

The presence of a Muslim pupil in a class may become a suitable way of developing the prevention of xenophobia. In this context, the life story of a child can be very strong; if he/she is treated sensitively, the rate of empathy among other schoolmates increases.

Explaining the specific reactions of Muslim pupils to other schoolmates appears to be suitable. Classmates can draw attribution conclusions by themselves on the basis of their experience, and through an informal conversation with a Muslim pupil; it is more appropriate that they draw these conclusions within group discussions moderated by a pedagogue. The inability to tolerate each other may become a factor encouraging negative attitudes or even bullying.

All the respondents stated that they had not encountered any intercultural conflict or clear demonstration of Islamophobia. However, they admitted that they could have occurred if their school had not been characterised by the typical long-term intercultural experience, which taught children to tolerate dissimilarity. In general, students with better grades were accepted to a higher extent. From the pedagogues' point of view, children described as introverted and locked away, which applied mainly to Muslim girls from orthodox families, feel non-admitted.

At the same time, it is suitable to explain the specific approach to Muslim pupils. According to our conversation partners, schoolmates are very sensitive to the issue of justice in duties and evaluation. However, too much emphasis on dissimilarity leads to exclusion from the class, dissimilarity becoming the main label of the child: "If I keep emphasising that he is different, the children would treat him in a different way."

On the **level of the teacher**, a tolerant approach is expected, which can be seen either in the real actions or on the level of the teacher's attitude. It is advisable that both the levels should correspond. The attitudes can be based on external expectations (of the school or the society as a whole) or internal belief.

A sort of uncertainty of teachers can be seen; they express their uncertainty in being in contact with the different culture. Mainly the more orthodox Muslim pupils and their parents bring their belief and habits into the public space of our school system, they require a special approach; thus, teachers do not know how they should legitimise their tolerance to dissimilarity ("It was extremely difficult for us to find the ways, not interfering in their religion"). The pedagogues lack clear external guidelines; external expectations are too vague; the definition of the principles of a pluralistic society is missing. Moreover, teachers realise that the shared stereotypes associated with Muslims do not reflect reality; the experience and behaviour of Muslim children appears to be very wide.

In the teachers' attitude, ambivalence between the external imperative and internal belief is often seen: "I would say, we are too, too tolerant here. Very tolerant." Teachers know they are expected to be responsive to dissimilarity but they have not interiorised and reasoned this approach sufficiently. The ambivalence can be the source of stress and loss of confidence, bringing uncertainty related to limits, rules and their legitimisation.

Conclusion

One of the things that caught our attention was the discourse grasp of the phenomenon of the occurrence of dissimilarity in various forms by the teachers: "With most Muslims, you don't even know they are Muslims, they do everything they should do, they do not make any problems, they do not require anything extra and integrate with other children easily." The teachers described such behaviour of students, which is within the normative limits of school operation, as optimum ("he was apt," "he was active," "he was hard-working"). Attention is paid to those consequences of dissimilarity, which lead to increased efforts made by a teacher ("more work") and the necessity of more enthusiasm in teaching a student with special educational needs, his/her parents and classmates.

One of the unwritten rules of the current Czech school system, which will be breached by Muslim pupils, is its strictly secular character. It applies not only to particular ways of practising religion, but also to the collection of information about the forms of religious belief. As the following passage shows, religious behaviour in a school is beyond any imagination of the pedagogues: "Regarding religious needs, our school is open to all religions, but we do not practice anything here; no, I can't even imagine that we should have a prayer room here." It seems there is no place for opening any topics of spiritual aspects of world religions and interfaith dialogue in the current situation. The entry of Islam and faith-related topics in the public space, considered inevitable by some Muslims from Western Europe (Fetzer, Soper, 2005, p. 36), will undoubtedly meet with resistance in the Czech environment.

We do not dispute that working with children from a culturally different environment brings extra work and can be the source of frustration and uncertainty. The situation can be perceived as a threat. However, there is another point of view that presents it as a challenge (and it is often done). The presence of a Muslim pupil may enrich the teacher personally and lead to his/her improvement. This can include improvement of knowledge of the culture, religious specifics, but what is more important is the pressure for searching and defining one's own values and meaning of life.

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Early Intervention in Context of Special Education – Communication between Parents of Hearing Impaired Children and Professionals with an Emphasis on Auditory-verbal Therapy

Adéla Hanáková

Abstract

The goal of the following article is to open the topic of teamwork in care for clients with a hearing impairment. The consequences the hearing impairment has on an individual require complex and long-term professional influence, and, at the same time, more levels of these consequences induce the need for defining broadly the multidisciplinary, interdisciplinary and trans-disciplinary team of professionals participating in the education and the therapy of these individuals and their families. The topic of team approaches constitutes a very lively discussed issue providing an extensive space for scientific-research activity both in our country and elsewhere. In the next section, we focus on early intervention approach for children who are deaf or hard of hearing and their families.

Key words: team approach, family, child with hearing impairment, early intervention, professionals, auditory-verbal therapy.

Abstrakt

Cílem tohoto článku je otevřít téma týmové spolupráce v péči o klienty se sluchovým postižením. Důsledky sluchového postižení vyžadují komplexní a dlouhodobé působení ze strany profesionálů. Zároveň toto téma vyvolává potřebu definovat multidisciplinární, interdisciplinární a transdisciplinární tým odborníků účastnících se na vzdělávání a terapii těchto jednotlivců a jejich rodin. Téma týmových přístupů představuje velmi živou a diskutovanou oblast poskytující rozsáhlý prostor pro vědecko-výzkumnou činnost a to jak v České republice, tak v zahraničí. V další části textu jsme se zaměřili na auditivně-verbální terapii.

Klíčová slova: týmový přístup, rodina, dítě se sluchovým postižením, raná intervence, odborník, auditivně-verbální terapie.

Introduction

The results showed that the most children who are deaf or hard of hearing are born to parents with typical hearing. Generally, we can say that the diagnosis is usually shock, confusion and frustration. Most parents want to do something immediately to alleviate their concerns about not being able to communicate effectively with their child and that their child will not learn to talk. With unprecedented advances in hearing technology and the assistance of professionals who are trained in family-centered education and therapy, most children who are deaf and hard of hearing can learn to communicate efficiently using natural spoken language developed primarily through listening.

In the sphere of care for individuals with a hearing impairment, the topic of team approaches is a currently highly discussed issue reflected by many scientific domains, in particular, because serious consequences of this impairment require complex and long-term professional influence since the professionals' intervention is usually not a matter of one isolated domain.

The more complicated the complex picture of an individual with a hearing impairment is, the more the interdisciplinary or trans-disciplinary approach is usually required. Not only for these reasons does this phenomenon evoke the need for highly individualized care. A hearing impairment ontogenetically interferes, depending on its characteristics, in the cognitive processes, influences the parameters of individual (expressive and impressive) and social communication, influences the educational processes in their course and result, and has an impact on many other qualities of life of an individual with such impairment.

With regard to the fact that the development of communication of an individual with a hearing impairment affects his/her socialization, education, etc., speech and language therapy is specifically represented in the process of intervention with re-

spect to this individual. Not only for these reasons must it remain an interdisciplinary, multi-professional and cooperatively and integration-oriented science (Günter, 1996 in Lechta, 2002). "However, at the same time, it is inevitable (in the interest of people with impaired communication ability) to maintain the balance of the influences of individual correlative sciences in a manner such that none of them prevails and dominates in this interdisciplinary (trans-disciplinary) constellation (Lechta, 2000 in Lechta, 2002). As reminded by Grohnfeldt (1989 in Lechta, 2002), multi-professional cooperation is not about the alternative (either, or) or about the struggle for superiority, but, essentially, about the symbiosis.

Lechta (2002) emphasises the holistic approach, in which the human, as a bio-psychosocial being, is the centre of attention, including his/her special needs and the specifics of his/her environment. For the needs of our topic, we must also consider the emotional setting of the family and their expectations and ability to take part in the intervention.

It is necessary to take into account that despite the best professional help possible, the parents' experiences cannot be influenced. As stated by Šedivá (2006, p. 34): "Psychologists, teachers, speech-and-language therapists and other professionals should realize that even if they provide the best support, the most complex information and the most erudite advice with a great amount of empathy, the parents have no one but themselves to deal with this problem. For this reason, they should keep on top of things even at the moments when the family do not respect well-meant advice and do not behave, in the professional opinion, to the child's benefit." Despite all this, the author draws attention to the necessary strengthening of the feeling of parent competencies in dealing with the child.

However, a complete team is usually available only in larger or specialized workplaces where mutual cooperation and trust amongst individual team members should be a matter of course. Much complicated is to build a work team in places where individual professionals are distant from one another within a district and do not often know one another personally. Therefore, it always depends on the professional and personal qualities of each of the involved professionals (Škodová, 2003).

The high need for defining and describing individual team approaches stems from the need for a multidimensional analysis, known as the principle of an actually complex examination. The thing is that only the multidimensional analysis guarantees the actual identification of the depth of a problem, and since it considers all possible dimensions of a problem, it is capable of reducing to the minimum the risk of an erroneous diagnosis that would threaten in case of the subjectivistic consideration of these deviations (Lechta, 2003). According to the author, the objection that such a method of examining is time- and professionally-consuming cannot hold water. Even if the objection of time-consumption cannot stand, a time-economical principle containing the requirement for determining the most accurate diagnosis and interventional procedures for

an optimum period of time must be respected in this case. As stated by Lechta (2003, p. 26): "It only seemingly contradicts the stated need for a multidimensional analysis since only by means of this analysis, it is possible to arrive at the most accurate diagnosis for a reasonable period of time and, in particular, to avoid errors associated with a hasty and shallow diagnosis that is seemingly fast because, as a final consequence, it may extend the time necessary to examine and, particularly, correct the impaired communication ability."

In more complicated cases, such as the issue of hearing impairment, the overlapping of the diagnostic process with the therapeutic process, that is, the continuality of the diagnosis, is more and more promoted. At present, a diagnosis accompanying the whole process of stimulating a child is required (Lechta, 2003). From this point of view, the contact with another parent of an older child with a hearing impairment, who already has some results and experience in caring for such child, may be very functional for families of the diagnosed child. It is also important to warn the parents from the very beginning that every consulting, educational, social or medical institution is a facility the services of which can or do not have to be used and which does not take responsibility for their child (Šedivá, 2006).

Characteristics of Team Approaches

The above multidimensionality of problems requires a team approach. Nackashi, Dedlowová, Dixon-Woodová, Kerekrétiová, Krahulcová and others state various models of team approaches developed in the last decades. The basic criterion of the evaluation is the mutual interaction of professionals, its method and frequency of implementation, and the communication amongst individual team members in the diagnosis and therapy. The big significance of mutual communication is emphasised, for example, by Valletutti, Christoplos, Moller, Starr, Kerekrétiová etc. – the authors state that communication is the basic prerequisite of the cooperation. The same important role is ascribed to the coordination.

Kerekrétiová (2008) states that in the past individual professionals worked independently of one another and only had information about the child from written reports; for this reason, they were not able to identify any common sphere of interest given by the child's and his/her family's needs. In particular, the lack of knowledge in terms of the role of other professionals formed an insurmountable obstacle in achieving effective care for clients and their families – these were often left to themselves due to the lack of mutual cooperation among professionals who were short, in particular, of the integrated decision-making, planning, help and support.

Mono-disciplinary versus Multidisciplinary Team Approach

We talk about monodisciplinary care when a client is treated by one professional – specialist (Kerekrétiová, 2008). On the other hand, the multidisciplinary team approach lies in individual work of every professional working independently of others. Although every member of a multidisciplinary team has his/her own specific role in the sphere of intervention, the communication among individual professionals is limited. The negative effect ensuing from this approach is, for the individual with a hearing impairment and his/her family, a huge amount of evaluations and information from various experts with the absence of mutual communication, coordination and cooperation, in particular, in the final decision on the intervention plan. Despite its negatives, this approach is often understood as traditional (Krahulcová; Kerekrétiová, 2008).

Interdisciplinary Team Approach

A modern approach not only in the sphere of care for an individual with a hearing impairment is the interdisciplinary team approach that is slightly similar to the multidisciplinary model since intervention is ensured for clients by individual professionals. However, unlike the multidisciplinary approach, the interdisciplinary approach is characterized by mutual communication, coordination and cooperation that ensure the complexity and longitudinal nature of care for individuals with hearing impairment.

"In this team approach, individual professionals evaluate and diagnose in their own workplaces independent of the other team members. They meet regularly to plan individual examinations, notify one another of the results and the recommendations for further intervention plan and altogether prepare a report containing their diagnostic conclusions and recommendations. This approach encompasses a higher degree of interaction among team members, leading to a uniform intervention plan and its implementation. This model ensures cooperation, interaction and communication amongst various specialists participating in complex care. They can but do not necessarily have to be together. However, it is essential that they plan the intervention procedure together. An intervention plan is only created when the team members meet and discuss their diagnostic findings, observations and recommendations and new knowledge. The final care plan is elaborated on the basis of all professionals' recommendations" (Kerektériová, 2008, p. 176)

Trans-disciplinary Team Approach

If individual team members are familiarized with other professionals' intervention procedures, we talk about the trans-disciplinary team approach. This approach is generally considered as the most modern and progressive. As stated by Kerektériová (2008), a trans-disciplinary team is formed by members with good knowledge of the issue of other domains and their cooperation with representatives of such domains. "Their intervention procedures are interrelated and complement one another in the overall care for patients. Although the competencies of individual professionals are defined even here, it is the variety of opinions that enables the complex attitude to a problem and the tasks ensuing from it. This is beneficial, to a large extent and as a final consequence, to the patients to whom such care is provided" (Kummerová, 2001 in Kerektériová, 2008, p. 176).

The author further states that the role of a coordinator is played by one or two team members who shall find out, by questioning the client and his/her parents, any special needs, serious problems and changes in the last period, with which he/she shall familiarize all team members before the meeting takes place. "Every expert is responsible for his/her examination of which he/she shall notify all team members (possibility of opening a discussion). Upon mutual agreement, the coordinator shall inform the whole team and the parents about the final results of the examination, the next therapeutic procedure, the time plan and the recommendations, both verbally and in writing in the form of the final report"(Kerektériová, 2008, p. 176). Ideal cooperation within the trans-disciplinary team approach results not only in team members extending their knowledge of the individual participating domains, but also helps unify and coordinate the overall complex care with regard to every child's specific needs and, as a final consequence, the most efficient complex care is provided (Kerektériová, 2008).

"Arena-style Approach"

Kerektériová (2008) states that Area-style approach is an extended form of trans-disciplinary approach (for more see Wolery, Dyk, Bzoch). These authors (in Kerektériová, 2008) state that this approach does not consider team members as mere passive observers but rather as active participants in the common diagnosis. "The facilitator shall make contact with the child and starts examining him/her in the presence of the whole team. Individual team members may interact with the child on various levels and in various degrees and to various extents. This approach is advantageous as it reduces direct work with a child and prevents the repetition of tasks and questions. Close cooperation of individual specialists is considerably reflected in the quality of the provided intervention."

We consider the professionals' ability to complement and help one another, including good results in the given domain, as crucial component in the context of our topic. As stated by Kantorová (2007, p. 10): "The paradox is that neither the representation of all roles is capable of automatically guaranteeing good results and optimum cooperation inside the team. People have their needs, interests and motives that may contradict those of the other members of the team."

Auditory-Verbal therapy (AVT)

Auditory-Verbal therapy is an early intervention approach for children who are deaf or hard of hearing and their families. AVT focuses on education, guidance, advocacy, family support and the rigorous application of techniques, strategies, conditions, and procedures that promote optimal acquisition of spoken language through listening. It's very important to add, that spoken language through listening becomes a major force in nurturing the development of the child's personal, social, and academic life.

A longitudinal study (Dornan, Hickson, Murdoch, Houston, Constantinescu, 2010) reported positive speech and language outcomes for 29 children with hearing loss in an auditory-verbal therapy program (AVT group) (aged 2 to 6 years at start; mean PTA 79.39 dB HL) compared with a matched control group with typical hearing (TH group) at 9, 21, and 38 months after the start of the study. The current study investigates outcomes over 50 months for 19 of the original pairs of children matched for language age, receptive vocabulary, gender, and socioeconomic status. An assessment battery was used to measure speech and language over 50 months, and reading, mathematics, and self-esteem over the final 12 months of the study. Results showed no significant differences between the groups for speech, language, and self-esteem. Reading and mathematics scores were comparable between the groups, although too few for statistical analysis. Auditory-verbal therapy has proved to be effective for this population of children with hearing loss.

Variables Affecting Progress and Outcomes

Each family and child is unique, with a specific living and learning style. Progress depends on a number of variables, including age of diagnosis, cause of hearing impairment, degree of hearing impairment, effectiveness of amplification devices or a cochlear implant, effectiveness of audiological management, hearing potential of the child, health of the child, emotional state of the family, level of participation of the family, skills of the therapist, skills of the parents or caregiver, child's learning style and child's intelligence and the above mentioned team approach.

Auditory-Verbal Professionals

In my opinion it's necessary to focus on auditory-verbal therapist, who is a qualified educator of the hearing-impaired, an audiologist or a speech-language pathologist who has chosen to pursue a career supporting the guiding principles of Auditory-Verbal therapy. On January 2006, ten principles of Auditory-Verbal therapy were adopted by the AG Bell Academy for Listening and Spoken Language. All ten principles are to be followed by professionals who provide auditory-verbal services. Auditory-Verbal therapist is part of the team of the Auditory-Verbal Therapy Program. Primary members of the team consist of child and family, auditory-verbal therapist, audiologist and E.N.T. doctor. Among other specialists, who are part of the team belong psychologist, clinical geneticist, physiotherapist, social worker, occupational therapist, family doctor, speech and language pathologist and school personnel staff.

The Listening Environment

Auditory-verbal practice encourages the maximum use of hearing in order to learn language and stresses listening than watching. Therapy, therefore, needs to be carried out in the best possible acoustic conditions. The listening environment is enhanced by parents and/or therapist sitting beside the child, on the side of the "better" ear. Important is speaking close to the child's hearing aids or cochlear implant microphone, minimizing background noise, using speech that is rich in melody, expression, and rhythm and using acoustic highlighting techniques to enhance the audibility of spoken language.

Most auditory-verbal programs offer weekly therapy sessions, usually lasting one hour, although some private programs and independent therapists provide therapy intervention more often. More therapy may or may not be advantageous and would depend on many variables. Through motivation and guidance, the parents acquire the confidence to implement techniques, strategies to reach specific goals in audition, speech, language, and cognition and communication development.

Auditory-Verbal Technique – HAND CUE

The Hand Cue is one from described techniques used to varying degrees in most auditory-verbal therapy programs to emphasize the use of audition in the acquisition of spoken language. The Hand Cue signals the child to listen intently. It must be used only when necessary, in that some of its uses distort, smear, or eliminate the sound arriving at the microphone. As children come to rely on their hearing, the use of the Hand Cue

diminished. Once the child has integrated hearing into his or her personality, the Hand Cue is rarely used.

Conclusion

The text provided information on the highly discussed issue of team approaches in care for individuals with a hearing impairment, in particular, because serious consequences of hearing impairment require long-term and complex influence on the part of professionals. Intervention in relation to these individuals is usually not a matter of one isolated domain. For this reason, characteristics of the individual team approaches were offered. In the next section, we focus on early intervention approach for children who are deaf or hard of hearing and their families.

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Knowledge of Pupils with Special Educational Needs and Inclusion in Teachers at Common Primary Schools

Ivana Horváthová, Dita Finková

Abstract

This paper presents empirical findings on knowledge concerning pupils with special educational needs in primary school teachers. We identified the problematic areas as those with confirmed weaknesses. We also pointed out teachers' interest in education in the field of special educational needs. The main finding was that teachers missed some important information and knowledge of special educational needs in integrated pupils, and methods of inclusion. The paper documents the need to continually improve institutional education focused on pupils' special educational needs. Especially, increasing the quality of professional-methodological as well as generally-pedagogical preparation of future educators as a key role is most demanded.

Key words: life-long education, special educational needs, integrated pupil, inclusion

Abstrakt

Článek přináší empirické poznatky o znalostech učitelů na „běžných" základních školách o žácích se speciálními vzdělávacími potřebami. V práci jsme identifikovali oblasti, kterých se nedostatky týkaly. Dále jsme poukázali na zájem pedagogů o vzdělávání

v oblasti speciálních vzdělávacích potřeb. Hlavním zjištěním bylo, že pedagogům chybí některé důležité informace, poznatky o speciálních vzdělávacích potřebách integrovaného žáka a začlenění. V práci jsme určili oblasti, kterých se nedostatky týkaly. Poukázali na zájem pedagogů o vzdělávání v oblasti speciálních vzdělávacích potřeb. Práce dokazuje, že je třeba neustále zlepšovat institucionální vzdělávání se zaměřením na speciální vzdělávací potřeby žáků. Zejména zvyšovat kvalitu odborně-metodické, stejně i obecně pedagogické přípravy pedagogů.

Klíčová slova: celoživotní vzdělávání, speciální vzdělávací potřeby, integrovaný žák, inkluze.

Introduction

According to the Institute of Information and Prognoses of Education (statistical data on individual integration of pupils from 1996–2008, 2009 and 2012), inclusion of pupils with special educational needs is becoming more and more common. This fact relates very closely to work and awareness of teachers at primary schools.

In relation to the above, we would like to outline the current situation at common primary schools and the level of teachers' knowledge of special educational needs of integrated pupils. Do teachers have sufficient information in the field of special educational needs? Are they interested in further education focused on special educational needs of pupils? Are they capable of providing adequate conditions for pupils within their school inclusion?

As stated in Borešová, Vančová (2003), the rapid growth of findings and information pool in all spheres of life makes it an obligation to enhance one's own education in all spheres and areas of human life. A person acquires fundamental information that is later intensified and complemented by additional information. At present, acquisition of new information is not exclusively tied to school education or to educational institutes but to life-long or continuing education. It depends on each person whether he/she is able to adapt and to what extent professionalism and personal growth is important for him/her.

We agree with the opinion expressed in the Memorandum of Long-life Education (2001) that long-life education is not the only aspect of education in professional preparation anymore; it must become one of many principles of providing additional possibilities and participation in education in its most diverse contexts. We believe that this vision should be materialized in the future.

The main objective is that this vision, to a sufficient extent within the system of life-long education, facilitates access to new qualifications through prime-quality education and with the support of complex consultancy services in the course of the entire life and

Knowledge of Pupils with Special Educational Needs and Inclusion
in Teachers at Common Primary Schools
Ivana Horváthová, Dita Finková

thus contributes to maintaining the highest possible employment and to increasing participation of the public in life-long education (Policy of Life-long Education, 2007).

Research

In general, it is expected that further education of teachers will result in deeper knowledge of special educational needs of pupils. The outcomes of our research uncovered weaknesses in awareness in this area but, on the other hand, showed sincere interest on the part of teachers in improving the quality and quantity of their knowledge. Inclusion is considered as a positive phenomenon in the today's society and teachers are willing to adapt to the new situation in respect to possible institutional education.

The research group consisted of 108 teachers from different primary school classes. Of these, 87 educators (80.6 %) graduated from a faculty of teaching and 20 educators (18.5 %) graduated from other faculties, most frequently faculties of arts. In some cases there were teachers who did not have any pedagogical education. It is generally known that, at present, young graduates from faculties of teaching find jobs more often in branches that are more favourable financially.

We found that the quality and quantity of knowledge in educators depended on the age of the respondents. Younger teachers probably attended a subject focused on special educational needs during their studies and, consequently, their knowledge (quality- as well as quantity-wise) in the given issue was at a higher level. In general, we believe that teachers have merely basic information on pupils with special educational needs, probably based on direct experience in the school environment. Also, teachers do not follow professional literature.

At most primary schools (65.7 %), there are at least one or two students with special educational needs. We believe that teachers' direct experience influences their evaluation of "the easiest and the most difficult" integrable pupils and, in the end, also the numbers of integrated pupils in a class. We are not sure whether certain questions (What is, in your opinion, an optimal number of pupils in a class including also pupils with special educational needs?) were understood correctly. Based on the responses, it is obvious that teachers do not know how the presence of a pupil with special educational needs affects the total number of pupils in a class when interpreted from the perspective of legal stipulations.

This happens despite the fact that 53 % respondents teach a class with an integrated pupil and, thus, have personal experience. We learnt from the responses that the quality and quantity of related information were only superficial, and we believe that this can be caused by various circumstances, such as moral and financial motivation, overexertion of teachers, and non-existent adequate education activities.

Older respondents, aged between 36 and 59 years, showed lack of interest in further education because they consider it unnecessary due to early retirement and/or termination of their teaching carrier.

It is highly probable that the level of knowledge in the area depends on one's achieved level of education; however, maybe even more, it can also be subject to the teachers' qualification. In our research, we monitored 20 respondents (18.5 %) who graduated from faculties different from faculties of teaching. Awareness of the issue is at the lowest level in such respondents when compared to qualified professionals.

When evaluating pupils with special needs, it was clearly evident that teachers (75 %) placed only those pupils into this group that had health impairments and learning and behavioural disorders. They failed to realize that this group also includes talented children and children from minorities.

We also deduced that teachers demonstrated problems with the terminology of individual disorders and impairments, and we very frequently encountered incorrect and colloquial terminology.

We also found out that teachers were interested in such education but it was highly conditioned by the fact whether such a pupil was/would be in their class (34.3 % respondents). On the other hand, only 17.6% of the respondents showed no interest in such further education. We assume that it is necessary to register this interest and provide the necessary support. However it is certain that this percentage of interest in further education shall be dependent on the length of the training, the contents, the demandingness, etc.

In line with the new trends and tendencies constantly reflected in recent pedagogy, the need and requirement for continual education is obvious, and we believe that this is one of the reasons for the interest of teachers in further education.

Table 1

Division of respondents by interests in institutional education with focus on special education

	Number	%
1.	16	14.8
2.	3	2.8
3.	11	10.2
4.	17	15.7
5.	37	34.3
6.	19	17.6
7.	5	4.6
N	108	100

Legend to the table
1 yes, in every case
2 yes, only in case of working hours
3 yes, in case of expenses being covered
4 yes, in case of my carrier
   and financial promotion
5 yes, in case such a child attends
   our school
6 not at all
7 no response

It is encouraging to find that, despite differing motivation criteria, there is evident interest in further education. Educators feel this need due to the increasing number of integrated pupils as shown in real-life practice of primary schools.

Conclusion

In our paper, we concentrated on the level of knowledge of the subject of special educational needs and inclusion in teachers at primary schools.

We found that the knowledge of primary school teachers about pupils with special educational needs are merely superficial and are based on direct experience of teachers, hardly at an adequate professional level. The principal finding was that the teachers missed some important information and knowledge about special educational needs of an integrated pupil. This work aimed at identifying such areas, which are most affected by the prevailing weaknesses. We identified teachers' interest in further education in the field of special educational needs. Our work proves that it is important to continually enhance institutional education focused on the special educational needs of pupils, especially to increase the quality of professional-methodological as well as generally-pedagogical preparation of future educators. Teachers have only basic information of inclusion and integrated pupils resulting from their assumptions, without personal contact with individual handicaps. Despite these facts, teachers are well aware of the shortcomings in their knowledge and show interest in further education in this area because, as stated by the teachers themselves, integration of pupils with special needs is an every-day experience now. We managed to give answers to all posed questions.

Nevertheless, we would like to refer to certain limitation of our findings. One possible factor, which reduces generalization of all teachers, is the fact that our results express exclusively the opinions of teachers that were actively teaching in the course of the realization of our research. Each year, however, a number of teachers leave the school professional environment due to retirement or change of profession, and these are replaced by new graduates with their own opinions, knowledge and information.

As a consequence of insufficient information in the area discussed, we cannot be sure whether teachers understood all terms and questions in the questionnaire correctly. At the same time, we are unable to interpret the honesty of some responses in respect to the pressure of new thoughts and to responses that are socially expected.

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Children with Cochlear Implants: Educational Placement and School Adjustment

Jiaojiao Wu

Abstract

To investigate the educational placement of children with cochlear implants and to study the adaptation level of these children and relevant influencing factors. Twenty children with cochlear implants were randomly selected and their parents and teachers were interviewed by telephone. The educational placement situation and the influencing factors on the adaptability of children with cochlear implants were studied through archival analysis, field observation and recording and in-depth interview. The child characteristics, acceptance of schools and teachers, family expectation, parents' communication had significant effects on the educational placement of children with cochlear implants. Results also indicated various sources of influence on school adjustment of these children after moving to educational placement, associated with the child, with the placements, with the families, and with other aspects. The educational placement shall be provided based on the characteristics of children and on the premise of meeting the unique educational needs of children, thus further providing the educational support for children with cochlear implants.

Key words: Cochlear implants, educational placement, school adjustment, influencing factors

Introduction

Chinese domestic cochlear products came to market in 2011, which means that more people in need can offer cochlear implants by themselves or their families in China. Loosening cochlear indications in recent years, number of cochlear implants increased annually (Liu Jianju et al., 2012), more and more children implanted younger. It is blindingly obvious for all to see a large number of children with cochlear implants will face problem of educational placement. Though a variety of recent domestic studies have done in domains of cochlear effect, speech perception and language development, academic achievement etc., studies of educational placement are relatively rare.

Some foreign studies (e. g., Svirsky et al., 2004; Connor, 2006; Marschark et al., 2007) have shown that children with cochlear implants have demonstrated benefits to hearing, language, and speech from implants, leading to assumptions that early implantation and longer periods of implant should be associated with higher reading and academic achievement. Though studies by Archbold (Archbold et al., 2002) and Fortnum (Fortnum et al., 2002) confirmed the effect of cochlear implantation on education setting in favor of mainstream placements, noting that the shift in placement roughly equates the pupils with cochlear implants with severely deaf pupils of the same age, more school-aged deaf pupils with cochlear implants moved in the inverse direction over time (see Thoutenhoofd, 2006; Marschark et al., 2007). This article focuses on the implementation of the educational placement and school adjustment of children with cochlear implants. Considerations of methodological shortcomings in existing research as well as theoretical and practical questions yet to be addressed provide direction for future research.

1 Methodology

This study utilized data from multiple sources to gain a panoramic view of implementation of educational placement of children with cochlear implants. Telephone survey data were augmented by archival analysis of children and interviews of parents and teachers. A telephone survey protocol was developed to know (1) the impetus for the educational placement; (2) the process of their educational placement, including difficulties they encountered; and (3) whether a particular child had placement changes. The influencing factors on the adaptability of children with cochlear implants after moving to placements were studied through field observation and in-depth interview. During the in-depth interview, participants were asked to respond to a series of open-ended questions to describe children's school adjustment in their settings.

Twenty children with cochlear implants were randomly selected within Chengdu city, Sichuan province, China.

Table 1

Child participant demographics (N = 20)

No.	Genders	Age now	Age of implantation	Hearing status now (dB)	Placements
		(month/year)	(month/year)		
1	female	1/4	2/1	25	public kindergarten
2	male	2/4	3/1	20	public kindergarten
3	male	7/4	6/2	15	public kindergarten
4	male	9/4	0/2	20	private kindergarten
5	male	6/2	5/5	16	public kindergarten
6	5/5	8/5	2/1	70	kindergarten in special school
7	male	11/5	0/3	24	public kindergarten
8	male	3/7	3/3	35	moving to special school
9	female	2/8	2/3	25	regular school
10	female	4/8	4/3	50	special school
11	female	1/9	1/4	65	special school
12	male	9/9	9/5	50	special school
13	female	10/9	10/4	20	regular school
14	male	3/10	2/5	25	special school
15	male	1/11	1/6	20	regular school
16	female	5/11	5/6	35	moving to special school
17	female	6/11	6/6	14	regular school
18	male	11/11	9/6	25	special school
19	female	5/16	1/8	46	moving to special school
20	male	9/17	3/8	52	moving to special school

Note: Data were collected in October, 2012. Special school here means school for the deaf

2 Results

2.1 Educational placement

Twenty participants were placed in four different settings (see Figure 1), including 1 in the kindergarten affiliated to special school and 9 in special school, 6 in public kindergarten for hearing students, and 4 in regular schools. In total, 35 percent of children (5 years to 7 years old) are accepting preschool education; 65 percent of children are accepting beyond preschool education, including 11 children (8 years to 13 years old)

placed in primary school and 2 children (16 years to 17 years old) in the same high school for special needs.

Figure 1
Types of educational placements
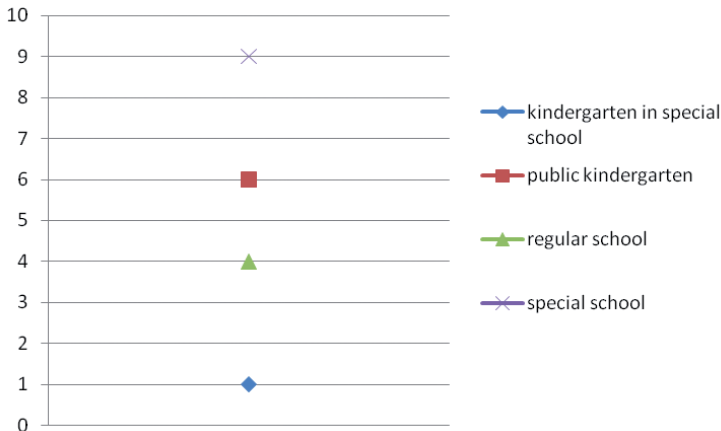
2.2 Factors that may affect educational placements

Table 2 indicates that individual characteristics are the main reasons for choosing types of educational placements for children with cochlear implants, including their hearing status, cochlear using level, mixed additional disabilities, personal experience as well as self-concept. When Luo chose junior high school, her experience in regular school came to her mind: the setting becomes more competitive, materials are more difficult, and expectations are higher. Her mom respected her decision and Luo finally moved to special school.

Look at the frequency given in descending order and hence the rate of answers to each coding items under every dimension is reduced gradually. Two other domains of influencing factors are closely related with family and educational placement itself. It was found that parents tend to choose regular schools and only use spoken language regardless of cochlear effect. What an important observation also suggests is that, for a number of children, communication varies at home, where signed communication model appears to be used much less. In fact, decision on communication influences a child's communication opportunities.

Table 2

Factors that may affect educational placements

| Dimension	Coding	Frequency	Percent
child characteristics	hearing status	17	85
	cochlear using level	14	70
	mixed additional disabilities	12	60
	personal experience	5	25
	self-concept	4	20
	total	52	
families	family expectation	16	80
	communication	8	40
	parents' hearing status	3	15
	total	27	
placements	school acceptance	13	65
	teachers' acceptance	7	35
	total	20	

2.3 School adjustment

After moving to placements, the school adjustment of children is different from each other according to implementation and assessment practices by observation and teacher interviews. All items and indicators intact are organized into four subscales: academic attainment, peer relationships, communication, and attitude towards learning.

Another notable finding in the data is that the adaptation level (see Figure 2) of the cochlear implants in special school is higher than other two types of placements. 6 children were reported to adapt themselves to special school very well. Only one child who newly moved to the special school was reported not well. The other 3 felt good in special school, reaching the average level. Just the reverse, only one child was reported very well in regular school, but two were reported not very well and were planning migration.

Figure 2
Children's adaption level in placement
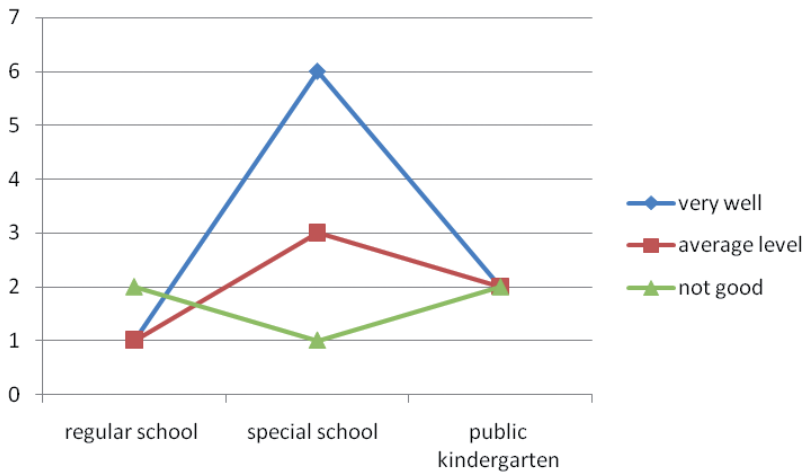
2.4 Factors that may affect children's school adjustment

Children's school adjustment in educational placement appears to depend on a variety of factors. Table 3 indicates a four-dimensional framework of factors: child characteristics, placements, family factors and the others. Some characteristics mark children off from the others. The total of eleven coding items are integrated: hearing status, communication, language development, study pressure, academic attainment, peer relationship, learning quality, emotion expression, intelligence, personality, and self-efficacy.

Looking at the frequency given in descending order, social support from teachers and peers, and professionals has significant regression effect on children's school adjustment whatever in any kind of placements they are. Families and whether the child accepted early childhood education and even different lengths of time moving to placement influence the school adjustment, usually, children encounter more problems at the beginning. To get enough information in real time that would allow for interaction during the class, however, children's generally educational needs such as the support of a note taker or real-time captioning option are insufficient.

Parenting a child with cochlear implants is not easy, some parents face challenges to meet the complex needs of children with cochlear implants. Likewise, family expectation influence family involvement in habilitation process, the same as the family functioning, which also influences how families involve in children's studies.

Table 3
0Factors that may affect children's school adjustment

Dimension	Coding	Frequency	Percent
child characteristics	hearing status	19	95
	communication	17	85
	language development	12	60
	study pressure	12	60
	academic attainment	11	55
	peer relationship	9	45
	learning quality	7	35
	emotion expression	6	30
	intelligence	6	30
	personality	5	25
	self-efficacy	4	20
	total	108	
placements	oral/sign language teaching	15	75
	class size	13	65
	teachers' acceptance	9	45
	teachers' special education skills	7	35
	arrangements of seats	8	40
	courses program	6	30
	educational environment	5	25
	total	total	
families	communication	18	90
	family functioning	15	75
	parental stress	13	65
	family expectation	11	55
	total	57	
others	early childhood education	14	70
	social support for professionals	12	60
	length of time moving to placement	6	30
	total	32	

3 Discussion

Changes in placement

The children in this study are predominantly based in special schools, a total of four children had migration between different placements, all of them moved from regular

schools to special schools, without exception. One child migrated on second grade, one moved on third grade, and another two had migration after their first year in high school. It must also be borne in mind that the changes in placement that were counted imply different kinds of change for children in different situations.

Huge study pressure is the key reason for causing their migration. It's really hard for them to fulfil academic requirements for school or teachers. And then, as time goes on, lower self-efficacy and acceptance level by peers happened, and finally they gradually grew up lacking interest in learning.

As for children who had good school adjustment, teachers reported their cognition developed well, they're outgoing and usually have many good friends in school. Parents have great role in child's psychological development and involves actively in studies to cultivate their learning quality.

Difference between preschool and primary or secondary school placements

In sum, children's adaption level in preschool is the highest in placements, namely, children's school adjustment is the best in kindergarten other than in primary or secondary school.

In kindergarten, most of the time children learn by playing games, however, it's totally different when they start the primary school, their schoolbags are getting heavier, and courses are more difficult. They have to face challenges of university entrance examination or thinking about job-hunting in senior high school.

The child and family have significant influences both on placement and school adjustment

The child characteristics strongly influence educational placement, there are a total of 52 frequencies, all coding are (see Table 2): hearing status, cochlear using level, mixed additional disabilities, personal experience of placements, and self-concept. For the family, family expectation, parents' hearing status, and communication are influencing factors. Table 3 indicates child characteristics that may affect children's school adjustment, a total of eleven coding items are integrated: hearing status, communication, language development, study pressure, academic attainment, peer relationship, learning quality, emotion expression, intelligence, personality, and self-efficacy. Also, family expectation, parental stress, communication, and family functioning have significant influences on school adjustment.

Insufficient support from regular schools

What matters in education is not how well a child can hear but whether a child has unimpeded access to the social interactive process of teaching and learning. In contrast with special school for deaf students, a hypothesis exists in regular school is that only spoken language access to education. The best approach might be a bilingual strategy

that be provided for children with cochlear implants. If we truly want these children to succeed, we must confront environmental and methodological barriers to education and to appropriate educational assessment (Marschark et al., 2006).

School acceptance remains to be further implemented. Where there is indeed progression toward bilingual approaches to teaching and learning. Teachers in regular school whose special education skills should be improved by making the fullest use of special education center and resources bases.

Conclusions

The study was mainly based on interview and observation, a notable finding in the data is that seven kindergarten children were implanted at younger age (1.7 years on average) than the primary and secondary school children (5.1 years on average). Nevertheless, age at implantation has been seen as a significant predictor of later placements (Archbold et al., 1998). There is need to do more follow-up studies of those kindergarten children.

The educational placement shall be provided based on the characteristics of children and on the premise of meeting the unique educational needs of children, thus further providing the educational support for children with cochlear implants. Parents, educators, and professionals must work together to assist children in achieving their goals. Educational strategies for children with cochlear implants must take into consideration that these children will need direct instruction to develop communication competence.

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Art Therapy as Part of Special Pedagogy

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Abstract

Use of elements of art therapy in the process of education and upbringing has been a very topical theme. Together with other expressive therapies art therapy has become part of preparation of teachers of pupils with special needs. As competences for the profession of art therapist have not yet been clearly defined in the Czech Republic, requirements for professional preparation for this job are not defined either. The structure of the subject of art therapy is often created by the teachers themselves. The authors of the present article analyse selected aspects of education in art therapy for students of special pedagogy at the Faculty of Education, Palacký University Olomouc and the Sichuan Normal University in Chengdu.

Key words: Art therapy, Art philetic approach, Special pedagogy, Job preparation, Cultural differences

Introduction

Expressive therapies have become an inseparable part of education and upbringing of children and pupils with special needs. Most Czech institutions where education is provided to these pupils use elements of expressive therapy to a different extent. In the years 2010–2013 Palacký University Olomouc organised a project called **Expressive Therapeutic Methods – Way to Change in Institutional Upbringing**. In the context of

this project elements of expressive therapies were introduced to the process of education and upbringing at selected institutions. These institutions mainly included facilities dealing with children and pupils with mental disorders or problematic individuals requiring a special approach to upbringing.

As elements of expressive therapies and therapy itself represent a welcomed part of work in education and upbringing in the above-mentioned institutions, attention must be paid to preparation of the teaching staff of these facilities so that they are able to include expressive therapies in their work in an adequate manner. For this preparation to work it is necessary not only to define the concept of expressive therapy, but also and above all to specify objectives and principles of preparation of the teaching staff for work with these therapies. In the context of preparation of teachers for use of elements of expressive therapies in their special teaching practice the present article will a further focus on certain aspects affected by the particular cultural environment, which in particular means comparison of approaches of students of special pedagogy subjects at the Faculty of Education, Palacký University Olomouc and at the Sichuan Normal University in Chengdu (People's Republic of China).

1 Art Therapy

Art therapy is one of expressive therapies using elements of fine art in work with individual subjects. At present art therapy is used in psychotherapy, healthcare and education. Due to its broad range it is necessary not only to define the subject of art therapy well but also to properly specify its principles and competences of specialists in this field.

Meanings of terms often change with changes in the society. The same applies to the notion of art therapy. Originally art therapy had a broad and a narrow definition. The broad definition characterised the discipline of art therapy as a generic term covering all therapies using any art form for work with clients. At present the notion of expressive therapy is used as this generic term. As expressive therapies developed in the course of time and evolved into different forms art therapy began to be defined as one specific branch of expressive therapy using for work with clients art forms corresponding to fine art techniques, as mentioned above. There are different currently used definitions of art therapy in Czech and foreign literature:

Art therapy is a psychotherapeutic and psychodiagnostic discipline using forms and means adequate to art forms for therapeutic purposes (fine art forms in the narrow sense and forms of art in general in the broad sense). (Present Art Therapy in the Czech Republic and Abroad, page 35)

Art therapy is one of the psychotherapeutic procedures. *Art therapy is based on art expression of the clients as the main therapeutic instrument. Art therapy does not aim at a technically perfect finished work of art but at the creative process* (Case and Dalley, 1995,

p. 9). Art expression can be defined as expression of feelings, opinions, emotions or concepts of the inner world of man by art instruments.

Art therapy is a subject using artistic expression as the main means of investigation of and influencing human psyche for the purpose of reduction of psychological or psychosomatic problems and conflicts in human relations. Creative art activities are to support health and healing. (www.arteterapie.cz [quotation 2014-09-11])

Art therapy uses fine art for work with a client. Fine art is thus used as a means of expression of feelings, moods and psychic conditions of clients. The above definitions further suggest that artistic expression of the client can be used in two different ways. These two different ways point to two different concepts of art therapy:

- Art therapy as psychotherapeutic discipline,
- Art therapy as psychodiagnostic discipline.

Art therapy as **psychotherapeutic discipline** focuses on the client's **creative process**. Art therapy is based on the self-healing mechanism of creation and the process and its result are not interpreted further. Art therapy as **psychodiagnostic discipline works** with the client's creative process and with the resulting artefact **further**. In most cases this further work involves a discussion about the creative process and the resulting artefact.

Zicha (1981) distinguishes between these two disciplines, defining them as **therapy by art** and **art psychotherapy.** Therapy by art uses the healing effects of the creative process. Art psychotherapy combines the creative process of the client with further work with the artefact resulting from this process. The focus of this work is reflex and verbal processing, i. e. interpretation of the artefact. Professional literature (Zicha, 1981; Stiburek, 2000) sometimes distinguishes these two streams from each other but admits that in practice a clear dividing line between these two concepts is often missing, and the two rather overlap and complement each other.

In addition to art therapy professional literature (Slavík, Stiburek, Potměšilová) uses one more terms, usually translated to English as an Art philetic approach. **The Art philetic approach** is closely linked to art therapy as it uses similar procedures as art therapy, transforming them to upbringing. The purpose of the Art philetic approach is not therapy but upbringing and contribution to self-recognition, development of positive personality features and the personality as a whole. Frequent use of the arthpiletic approach to education is currently part of prevention of social and other pathologies.

The spiritual father of the whole discipline and the author of the concept is Jan Slavík (1997), who defines the Art philetic approach as a special concept of art education or in the wider sense expressive education touching the field of art therapy and mainly focusing on authentic experience learning about man and his culture and development of emotional, social and creative aspects of human personality. According to Slavík (1997) the term Art philetic approach covers two areas of meaning:

- From the Latin **ars** – art,
- **Philetic** – an approach to upbringing combining creative expression with reflection.

The basic principle of the Art philetic approach is a combination of an expressive game (for example art game) with reflecting dialogue in education. The purpose of the Art philetic approach is to provide man with an opportunity to reveal his own psychic capabilities and limits, to give him a chance to find his place and role in the community of humans, to equip him with sensitivity to pain of other people, to prepare him for spiritual growth and finding the sense of life with support by human culture, especially art.

As the work forming the content of both disciplines is complex and involves high responsibility, the individuals performing it must be well prepared for their job. Art therapy is used as part of the psychological or psychotherapeutic process; while the Art philetic approach is use as part of the process of education and upbringing. The position of art therapists in the professional field of psychotherapies is not comprehensively defined yet and this is not a problem only confined to the Czech environment. For example Waller and Guthrie (2013) deal with the status of recognition of art therapy and its acceptance to the family of psychotherapies in Great Britain.

What is sometimes called art therapy in practice can rather be considered use of elements of this therapy. Use of elements of expressive therapies in the process of education and upbringing has its justification if the teacher is aware that this does not involve therapy as such.

Definitions of art therapy and Art philetic approach reveal that good preparation is needed for use of one or the other discipline in practice. In both cases art work allows for influencing the clients, whether in terms of their upbringing or for the purpose of their "healing". This influencing needs not only personality prerequisites but also good professional background.

2 Professional Competences

Like the concept of art therapy, the professional standards of art therapist keep developing. Still in 2012 the web site of the Czech Association of Art Therapists (hereinafter CAA) read that: *Art therapy as a profession and its rules and scope have not yet been clearly defined in our country. The role of art therapist is performed by graduates from a wide range of different subjects – special and art teachers, psychologists, physicians or nurses.* (www. arteterapie.cz [quotation 2011-04-12]) Since then a number of professional discussions have been held resulting in the following definition of art therapist qualifications:

Art Therapist Qualifications

1. *A collection of theoretical knowledge (psychology, psychopathology, psychodiagnostics, evolutional psychology, social psychology, psychotherapy).*
2. *Personality features, manual and intellectual skills (group work, skills and habits needed for the job within the scope of art therapeutic competences, knowledge and observation of ethical rules).*
3. *Practical skills (development of a working therapeutic relation, guidance of art work of clients and practical application of knowledge in the work of a therapist).*
   Qualification standards (with a view to reduction of risks connected with the profession of psychotherapist as well as with a view to the requirement for professional team cooperation in the context of the associated professions it is necessary to maintain high standards of qualification in all areas where art therapy is used):

Education

1. *Completed university education in pedagogy, sociology, medicine, psychology or art (Mgr., Bc).*
2. *Complex psychotherapeutic training (completed) accredited by the Czech Medical Society (ČLS) or the European Association for Psychotherapy (EAP).*
3. *Further education in art therapy:*
   a) *Bc in art therapy or SUR training with a special focus on art therapy and including theory, self-reflection and supervision,*
   b) *Accredited art therapy courses or courses guaranteed by the CAA in the minimum scope of 250 hours*
   Five years of practice in associated professions, including direct art therapeutic work with clients for 2 years (min. 500 hrs).
   Supervision – work under supervision for 60 hours and art therapeutic work under supervision, group work for 20 hours and individual work for 20 hours. In total 100 hours. Continual education according to the scores allocated to individual events.
   (www.arteterapie.cz [quotation 2014-09-12]).

This makes it clear that an art therapist must possess sufficient personality prerequisites for his job, including empathy and the ability to establish, maintain and terminate a client-therapist relationship. Communication skills should include harmony between verbal and non-verbal expression, which is especially important in contact with children and pupils with special needs. A therapist should be trusted. He or she is expected to be kind but clear and decisive in conduct. The client should feel safe in communication and should feel to be accepted by the therapist. Acceptance of a client, however, does not mean absolute agreement with all the client says or does. Xinrui LI (2014) states the

importance of training teachers in special education and also emphasizes development of communication skills.

The professional requirements show that an art therapist should be educated in the areas of **psychology and special pedagogy** as well as in the area of **visual art and art education**. An art therapist should further have attended a completed **self-reflective training in art therapy** or a university course in art therapy.[1]

Seeking definitions and characteristics of education and the professional profile of art therapist is also an issue dealt with internationally. For example Orkibi (2012) describes progress and results of a model course in art therapy in Haifa. The quality of the course is guaranteed by the university and quality of the supervision by experienced supervisors. The first feedback for the purpose of potential modifications is expected by the authors after three years of practical work of the first graduates with whom they keep contact.

As the purpose of the Art philetic approach is enrichment of the process of education and upbringing, a different, albeit similar demand, is placed on teachers of the Art philetic subject. Kalhous and Obst (2002) characterise basic competences of a teacher providing aesthetic education. These competences can be related to the Art philetic areas as well:

– Subject knowledge,
– Psychodidactic competence,
– Organisational, leadership and managerial skills,
– Communicativeness,
– Self-reflection,
– Personality qualities.

To summarise the above-mentioned competences a teacher of the Art philetic subject should not only possess systematic knowledge of the subject of visual art but also be able to create interdisciplinary links. He or she should be able to use methods of work creating a favourable climate in class. He or she should further be able to manage control classroom activities effectively and create an environment for effective communication, or reflex.

Slavíková, Slavík, Eliášová (2007) insist that in addition to professional competence allowing for use of artistic activities in the teaching process the Art philetic process also requires personality prerequisites and ability to create space for reflective dialogue. Apart from these assumptions the authors also emphasise the need for experience learning which the teachers should undergo. Explanations for the found differences needed to be sought in the creative profile, i. e. the personality feature of Chinese students and their engagement in the research population. One of the answers can

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[1]   For detailed information about the options of obtaining education in art therapy see the website of the Czech Association of Art Therapists.

be found in the study results published by Cheung and Leung (2014). Their research population consisted of Chinese nursery school teachers. A fact very important for the general conclusions presented by us is that creativeness is considered an important feature of teachers in China preconditioning their work in the area of education and upbringing. The authors of the research looked for parameters of creativeness and arrived at five fundamental factors, namely cognitive ability, discipline, motivation, inventiveness and personal properties.

This information mentioned above makes it clear that preparation for art therapeutic or Art philetic work is demanding and requires time (as least two years, but usually five years of intense training). Most seminars at universities and colleges are scheduled for one or two semesters, though. This means that the students are not provided with competences for art therapeutic or Art philetic work but only for use of elements of these disciplines in their work with selected target groups.

Below see an example of one such seminar with a comparison of approaches to this seminar of students from the Czech Republic and from China.

3 Art Therapy in Professional Preparation in Special Pedagogy

In addition to accredited training courses and specialised university courses in art therapy this subject is included in curricula of the subject of special pedagogy at most university type schools. Slavík (in Potměšilová et al. 2010) says that in the 1980s interest in art therapy shifted from the area of medicine to the area of special pedagogy. In addition to private schools special pedagogy is taught at the following university type schools:

- Charles University in Prague – Pedagogical Faculty
- Masaryk University in Brno – Faculty of Education
- Palacký University Olomouc – Faculty of Education
- Ostrava University – Faculty of Education
- Jan Evangelista Purkyně University in Ústí nad Labem – Faculty of Education
- University of Hradec Králové – Faculty of Education
- University of South Bohemia in České Budějovice – Faculty of Health and Social Studies
- Technical University of Liberec – Faculty of Education.

Except for the Technical University of Liberec, all the other schools have the subject of art therapy included in the syllabus[2]. The Technical University of Liberec has included "re-educative drama therapy" in its course. The above shows that the combination of art therapy and special pedagogy is highly demanded and topical.

The Faculty of Education, Palacký University Olomouc has offered the subject of art therapy taught by an external lecturer to students of special pedagogy since 2007. The scope of the subject is usually one semester and its orientation is adapted to the specialisations of the individual students (junior and secondary education, early care etc.). Regarding the number of lessons the students cannot be deemed to be equipped with the necessary competences for art therapeutic work. But they are equipped with the ability to use elements of art therapy in their work with children and pupils with special needs.

3.1 Sample Syllabus

To confirm what has been said above here is a brief example of a syllabus for special pedagogy students majoring in early care, including 36 art therapy lessons:

MAIN THEME	TABLE OF CONTENTS	LESSONS
Introduction to the Topic	• Subject Definition • Basic Terms • Historic Implications • Principles • Application Options and Limits	6
Art therapy techniques I	• Relaxation	10
Art therapy techniques II	• Self-reflection	10
Art therapy techniques III	• Communication	10

In the first six introductory lessons the students are acquainted with the basic aspects of art therapy. The discipline is put in context with other subjects. Thus the students acquire basic knowledge about the theoretical background of art therapy.

After that the students learn individual art therapeutic techniques. They use experience learning combined with reflection and receive recommendations for practical use in work with a selected target group.

Since 2010 we have organised periodic seminars for students of the Sichuan Normal University in Chengdu. Due to the organisation of study in China they are not students of special pedagogy but students of psychology and primary pedagogy prepared for work with children and pupils with special needs. The reactions of the Chinese students

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[2] The subject of art therapy is named differently at different schools and is included in the curricula either as a compulsory or as an optional subject.

in the course of work in the art therapeutic seminars are different from reactions of the students of the Faculty of Education of Palacký University Olomouc.

3.2 Comparison of Approaches of Students

When comparing approaches of students to art therapeutic techniques we chose two techniques used always in all groups. Thus our observations are not singular but the analysis is based on long-term monitoring and recording of student reactions (since 2007, or 2010, respectively).

Shared Drawing

Time: About 1 hour
Working aids: Basic art therapeutic set
Assignment: Take a sheet of paper, preferably a quarter, and something comfortable to draw with. In about 15 seconds draw anything that immediately occurs to you on the paper. After about 15 seconds stop drawing. Further instruction: "Now take your sheet of paper and pass it to your neighbour on your right hand side. You will receive the sheet of paper from your neighbour on your left hand side. Start drawing on it again." The instruction continues in this way until the drawing returns to its original author. The last instruction may be for example as follows: "Now you have your original picture in front of you again. If you want you can change anything that you do not like about it now." The round completion must be watched for. It is further necessary to observe the progress of the instructions and not to reveal too early that the pictures will be rotated.

Application of the technique:
1. This technique may be used as the "warm-up":
    a. For work with fear of insufficient art talent,
    b. For trying to interfere with work of others and at the same time allowing others to interfere with my own work – preparation for group work techniques.
2. The technique may also help reveal relations within the group. Especially in children's groups certain individuals may introduce vulgar symbols into the picture. For the lecturer this is a signal that something is happening within the group, which allows him or her to start working with this phenomenon.

Basic categories we defined for reaction analysis: Acceptance of group work, themes of the drawing, work atmosphere.

The following table shows the defined categories and student reactions within these categories. The first column shows reactions of students of Palacký University Olomouc and the second reactions of students of the Sichuan Normal University in Chengdu.

ACCEPTANCE OF GROUP WORK	
• Most students have no problem accepting group work • The discussion rarely reveals that a student did not want to pass his picture on or did not like to interfere with the picture	• All students accept group work without problem
THEME OF DRAWING	
• A simple specific picture (a house, a tree, an animal) • An abstract drawing (lines, shapes) • Joke drawings	• A simple specific picture (a house, a tree, an animal) • An abstract drawing (shapes)
ATMOSPHERE AT WORK	
• Happy atmosphere • Laughter • Expectations	• Concentrated expectations

After that we added more categories for a more detailed analysis: The ways of interference with the pictures, joking at work, presentation of the artefacts.

METHODS OF INTERFERENCE WITH THE PICTURES	
• Some students have problems interfering with the pictures • Some students prefer to interfere with specific pictures, others prefer to interfere with abstract pictures • Some students do not interfere with certain pictures	• All students interfere with all pictures without making distinctions
JOKING AT WORK	
• Usually a relaxed atmosphere develops very quickly • There are „teasers" who take the technique as a joke and add various joke elements to the pictures	• Concentrated work • Expected discussion
PRESENTATION OF THE ARTEFACTS	
• Relaxed atmosphere • Information about the feelings evoked by the picture in the individual • "Shy" inquiries about who added what to the picture	• Presentation of one's own picture in the form of a story • Open inquiries about who added what to the picture

On the basis of the above analysis the following conclusion may be drawn: Students of Palacký University Olomouc, despite the responsible approach to the work, also enjoy it. The following reflection focuses not only on feelings at work but also on practical application of the technique.

The students of the Sichuan Normal University in Chengdu fully concentrated on the work. They approached the technique as a teaching aid. In the context of the subsequent reflection each of the students introduced his or her picture in the form of a story. The students interpreted the individual elements in the picture. Finally some students asked whether what they said was correct. Further questions focused on practical applications of the technique and what needs to be done in different cases.

Communication in Pairs

Time: About 1 hour
Working aids: A set of art therapeutic aids
Assignment: Each pair was invited to take an A3 quarter and one pencil. The pencil was to be grasped by both individuals in the pair and they were asked to draw the picture together. The pairs were asked to try to work without talking to each other. *(the activity takes 5–10 minutes)*

Application of the technique:
1. Training in communication strategies.
2. Training in communication strategies with a client needing support.

For the first data analysis the same categories as in the case of the abovementioned technique were chosen:

ACCEPTANCE OF GROUP WORK	
• All students accept group work without problem	• All students accept group work without problem
THEME OF DRAWING	
• A simple specific picture (a house, a tree, an animal) • Funny nonsense drawing	• A simple specific picture (a house, a tree, an animal) • A human figure

ATMOSPHERE AT WORK	
• Happy atmosphere • Laughter	• Concentrated work

The following categories were selected for a more detailed analysis:

JOINT WORK	
• Most students quickly accepted the method of work and approached it with humour • "Acted disputes" appeared	• Concentrated work
PRESENTATION OF THE ARTEFACTS	
• Relaxed atmosphere • Communication of feelings during work • Questions about practical applications	• Presentation of the joint picture in the form of a narration – who did what • Clear inquiries about practical applicability

Students of Palacký University Olomouc again approached this technique in two different ways. They were able to enjoy the technique with a simultaneous focus on its practical applications. Students of the Sichuan Normal University in Chengdu again approached the technique as a teaching aid and were only interested in how precisely the technique may be used in practice.

Summary

Art therapy is one of the expressive therapies with a potential to become a working part of special pedagogy practice. For the potential to materialise the users must be properly trained. The necessity of a deep theoretical basis for art therapists and the need for their orientation in the world of art is reported by Gilroy (2008), pointing out the dynamics of the whole process with the help of a couple of examples of the combination of the professional profile with knowledge of the environment.

At present art therapy may be studied at the university or there is self-reflective art therapeutic training. These two types of training provide professional education of art therapists. In the case of accredited short-term seminars the trainees only obtain competences defined in the issued certificates and just allowing for use of certain elements of art therapy in teaching practice.

The aspects that need to be considered in the preparation include potential cultural differences in the approach to learning. As students from China study at the Faculty of Education of the Palacký University Olomouc, the approach of these students to selected art therapeutic techniques was analysed. The analysis showed that Czech students of the Faculty of Education, Palacký University Olomouc approached study of

art therapeutic techniques in two different ways. These students considered relevant both the experience and the professional part of the technique study. In the course of the work on the task they were able to "enjoy" the technique and on the basis of this personal experience they then asked appropriate questions and drew effective conclusions for practice. Students of the Chinese group lacked the ability to "enjoy" the technique. Their approach to all art therapy techniques was purely theoretical. The questions about the techniques focused on:

- What the individual symbols meant
- How precisely the technique should be used in practice
- What the particular reactions meant.

Although the students were repeatedly informed that the technique was a mere experience with the aim to develop a pleasant atmosphere and relaxed feelings they kept asking about further purposes of the technique. Some even asked for the reason why the pleasant work atmosphere should be developed.[3] For more information about reflection and its guidance in art therapy see for example Kiss (2013) or, with an overlap in pedagogy, Deaver (2012) and Gilroy (2008).

The relationship between the cultural environment and art therapy was studied by Malchiodi (2011) who emphasised the necessity of deep understanding of cultural differences by the art therapist with subsequent respect for the differences.

The above implies that Chinese students approach art therapy differently. They perceive the symbols in the artefacts as signs with a single possible meaning and its interpretation, which is neither possible nor appropriate in practice, and it some cases may represent outright opposition to the principles of art therapy. The facts found by us will affect the curriculum preparation for the Chinese students. For example by inclusion of self-reflective activities in the form of performance in a wider context according to Moon (2012). In addition to practical exercises there is also the principal need for further research in this area. Brennan (2011) refers to the need for theoretical work and research in this area which, if lacking sufficient theoretical basis updated by research results, may hardly keep pace with the "older" subjects. Research, says Brennan, belongs to professional preparation of art therapists, too. New technologies, the need for time and cost saving, will lead art therapy, like other subjects, to apparent dead ends. One of these is shown by Feen-Calligan (2008) whose contribution communicates options of on-line distance learning preparation of art therapists. We believe that this is not the right way, as the preparation requires reflection and self-reflection, which is hardly possible at home and at the computer. Efficiency of this approach may not even be increased by an appropriate pedagogical strategy emphasised by the author of the

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[3]   In the short discussion after the seminar the students informed us that in their country it was not allowed to laugh at lectures. This experience was also confirmed by some teachers who said that if they were joking they might lose authority.

above-mentioned article. Luckily the author closes her article by saying that this is the first – pilot – step and further verification requires well performed research. This is in sharp contrast to the compared research report published by Gerber et all. (2012) who, working with terms such as transcendence, transference or transformation, talk about the need for direct contact between the teacher (or Master in the case of therapy) and the student/pupil.

To conclude, in preparation of Czech and Chinese students for use of elements of art therapy and the Art philetic approach in the process of education of upbringing, cultural differences leading to a different approach to the above-mentioned disciplines need to be taken into account. Students from China must be taught that enjoyment of work is an important part of the process of the desired personality change and that different approaches to a single work may enrich all participants.

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Comparison of Live Satisfaction and ITS Components in Current Teachers and Selected Profession GROUPS

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Abstract

Psychological research of life satisfaction in teachers has a long tradition in many countries. Satisfaction expresses a certain degree of personal balance, personal happiness and very often personal activity and status within a society. The issue of life satisfaction associated with a profession and work satisfaction is generally understood as a mental condition of an individual characterised by feelings of joy, happiness, self-confidence and optimism towards the subjects and conditions of a specific work environment and own professional results. An optimum combination of life and work satisfaction presents a significant determinant of the teaching profession. The present study focuses on the assessment of the current state of life satisfaction and its components in current teachers in comparison with selected profession groups. The research involved a total of 544 adults of various professions, of which 213 were teachers. The aim of the research plan was to contribute to understanding the aspects that currently influence life satisfaction of teachers in comparison with selected professions. The main findings are presented and discussed in this paper.

Keywords: educational employees, live satisfaction, work specialization

Introduction

The general concept of satisfaction expresses a certain degree of personal balance, personal happiness and very often personal activity and status within a society. However, common understanding simplifies the concept into mental states after achieving certain goals and is based on a statement that satisfaction is the result of satisfied needs of an individual. An analysis of satisfaction though cannot be based merely on such simplified statement as this is a dynamic phenomenon closely correlated with human motivation and human driving and activating components.

An increasing interest of psychologists has recently been observed in the area of positive psychology, which, inter alia, focuses on the quality of life, in literature frequently referred to as QOL or well-being (Kebza & Šolcová 2005). This concept is usually expressed periphrastically in relation to other related concepts: in Anglo-Saxon terminology most frequently to 'satisfaction', often as 'life satisfaction'.

Each of the existing theoretical concepts dealt with positive life aspects. New systematic research of positive states and well-being started only in 1980s. The new area of scientific interest was marked 'Psychology of well-being'; currently it is a well-established psychological discipline. Thus a new direction in psychology was formed focusing on understanding positive forces in a human and their development (Blatný, Dosedlová, Kebza, & Šolcová, 2005).

Provided that we base our presumptions on psychological determinism, we accept that all life events are natural. We live in causal contexts determined by numerous circumstances of the natural or social life. Psychological determinism emphasises the acceptance of all behaviour, ideas and feelings as a natural result of a complex of psychological laws (Plevová, 2004).

Generally it can be presumed that the determination of overall subjective satisfaction of an individual is based upon two groups of factors: environment and personality. One factor includes external, occupational, social, political and economic conditions, and the other one includes personality characteristics of an individual. The same applies to the population of teachers; therefore, in analysing satisfaction of the teaching profession (both life and occupational) both these perspectives should be considered.

A significant factor of an individual's satisfaction is the area of work. Work is a life-long aspect and presents a significant part of human identity. The nature of work is production; however, it also presents an important aspect of personality shaping. Work activities develop an individual's capabilities, professional interests, attitudes, life opinions, personality and physical qualities. Contrary to other human activities (interest-based), work is always associated with responsibilities; therefore it has an effect on shaping an individual's volitional qualities. Work activity and the results of such activity influence the level of aspiration and self-confidence of an individual, while these qualities influence the course of the motivation processes. This is also related to the fact

that work is primarily a social category as it is a fundamental and natural condition of the existence of the human society. In this context, Jahodová (according to Mayerová, Růžička, 2001) define five basic needs satisfied through employment. For an employed individual, work thus creates a real time structure. It is an opportunity for regular shared social experience outside the family and allows an individual to share objectives and purposes reaching beyond employment. Employment defines the personal status and personal identity and last but not least activates a number of processes to which an individual is not motivated without employment.

An interesting aspect is a multidisciplinary perspective of work. Economists tend to define work as an opportunity to earn money. In their opinion it is a means of making money to ensure provision of goods or services and productive life. Psychologists perceive work as an opportunity to express oneself. Through meaningful work, an individual's needs and aspirations are saturated, an individual creates, shares and has an opportunity to find out about what he/she really is like (Blonna, 2005). Sociologists see work as an arena in which human interaction takes place. In this arena we take various roles and are engaged in a number of relationships. Being in these roles and exploring these relationships helps us achieve our full potential as social beings. We need others to self-actualize, and this can only happen in relationship with other individuals (Gill, 1999). Political scientists view workplace as a battlefield, where fight for power takes place, which is, according to them, the main determining factor of human occupational relationships (Blonna, 2005).

In our culture, work and employment play a crucial role. They are deeply embedded in the society and in an individual's psyche. According to Freud (in Mayerová, Růžička, 2001) work is a tie to reality. Giddens (according to Mayerová, Růžička, 2001) summarizes six characteristics of paid work that have a key significance for a human being: money, activity level, variety of living, time structure, social contact and personal identity.

The importance of work for an individual thus lies in the fact that the life of each individual and the whole society is affected. Work position influences the life of each individual, allows self-actuation and is a manifestation of an individual's social activity (Mayerová & Růžička, 2001; Pugnerová & Plevová, 2009). A total of six principal dimensions were identified that define the meaning of work for an individual. The first dimension is centrality, where work is in the centre of an individual's interests, which supports the fundamental role of work in an individual's life. Studies aimed at this phenomenon point to a fact that in developed countries work is regarded more important than free time, faith, society and family (which comes second) (Gill, 1999). Economic orientation is included in external needs and corresponds with a conviction that an individual is primarily motivated by a material perspective. Several research studies confirmed that the economic perspective is the main criterion associated with work. Internal orientation, i. e. internal work aspects, correspond with variables such as creativity, autonomy,

interest, variability and challenge and provide space for an individual's self-expression. Research indicates that internal work aspects present a significant predictor of work centralization. The fourth dimension comprises interpersonal relationships. Humans are social beings who need human interaction for healthy functioning. For some individuals work provides a place where they meet other people; for some it is even the centre point of collective activities instead of family and friends. Another dimension is the right of an individual for work. This area includes both the right and responsibility of an individual. The sixth dimension includes obligations, which present the other side of law. This means belief in social norms, each individual is responsible for respecting them and contributing to the development of a 'good' society through work (Blonna, 2005).

Teachers present a relatively stable socio-professional group and are subject to research studies with various objectives. Research objectives are defined by their potential utility or actual necessity: e. g. how teachers perceive their status, how they perceive the status of various teaching qualifications, what is their self-assessment in terms of their own occupation, what is the school climate, etc. A significant variable is the issue of quality of life appearing in the area of life satisfaction and its individual components. The total number of teachers in the Czech Republic is approximately 175 thousand (Průcha, 2005). Almost 40% of all teachers in the Czech Republic are basic school teachers. These data support the need for capturing the teachers' external as well as internal environment and their correlations. At the same time, space is provided for educational as well as psychological research of the teaching profession (Urbanovská & Kusák, 2005).

The aim of our research study is to identify the current level of life satisfaction and its components of the teaching profession. At the same time this study compares the values with selected professions.

Material and methods

Subjects
The research involved a total of 544 respondents. Data of 213 (195 women, 18 men) teachers from basic schools in the Olomouc Region were analysed. The average age of the monitored sample was 41.9 years, the most frequent age being 47, the age range was 20 to 67 years. The average length of teaching practice was almost 19 years.

The following professions were used for comparison purposes: public servant, practical nurse, sales representative, manager and medical doctor. A public servant (n = 111) is an individual carrying out an administrative function in a state authority. A practical nurse is an individual employed as a medium-level health professional. In the research practical nurses were employees from the University Hospital Hradec Králové and the University Hospital Olomouc (n = 78). A Sales representative (n = 54) is an employee of a private business company whose job is active promotion of the company, products

and professional representation of the company in a region. For the purposes of the research a manager (n = 42) is an individual in an executive position in private companies in the profit sector in the Czech Republic. A medical doctor is a graduate from university study of medicine (MUDr.) and works as a private physician (n = 46).

Table 1
Characteristics of study participants (*n = 544*)

	Number of participants (n)	Age (years ± SD)	Men (n/%)	Women (n/%)
Teachers	213	41.9 ± 7.19	18/8.5	195/91.5
Public servants	111	42.5 ± 8.54	33/30	78/70
Practical nurses	78	39.8 ± 6.48	7/9	71/91
Medical doctors	46	43.7 ± 5.62	29/63	17/37
Sales representatives	54	34.3 ± 6.01	22/41	32/59
Managers	42	38.4 ± 5.09	35/83	7/17
TOTAL	544			

Ethical aspects
The study was conducted in compliance with ethical aspects. The survey involved adult individuals on a voluntary basis. Each participant was informed of a possibility to terminate participation at any stage without giving any reason and without any sanction. All data were processed anonymously, it was impossible to identify specific respondents. The survey participants consented to anonymous data processing and use for scientific purposes.

Psychological assessment
To assess the current level of life satisfaction, the research study used a standardized psychodiagnostic tool – Life Satisfaction Questionnaire (LSQ) (Rodná & Rodný, 2001). The Czech version of the LSQ is based on the original German questionnaire Fragebogen zur Lebenszufriedenheit (FLZ) (Fahrenberg, Myrtek, Schumacher, & Brähler, 2000). The LSQ is designed for standardized description of inter-individual and intra-individual life satisfaction variability. The questionnaire aims at the assessment overall life satisfaction and its individual components: health, work and employment, finance, leisure time, partnership, relationship with own children, own person, sexuality, friends and acquaintances, living.

Each of the specified items contains seven statements. For each statement in each item the respondent tries to express the current level of satisfaction by selecting on a seven-grade scale. 1 = very dissatisfied, 7 = very satisfied. The overall value of life satisfaction is represented by the sum of gross score values in the seven defined items;

work and employment, partnership and relationship with own children are not taken into account (Rodná & Rodný, 2001).

Statistical analysis
With respect to the overall design of the survey the monitored values were compared by expressing material significance (effect size) based in Cohen's *d* according to the following formula:

$$d = \frac{M_1 - M_2}{SD_{pooled}}, \text{ where } SD_{pooled} = \sqrt{\frac{\left[(n_1 - 1) \cdot SD_1^2 + (n_2 - 1) \cdot SD_2^2\right]}{[n_1 + n_2 - 2]}}$$

The value of Cohen's $d < 0.2$ = small change, d 0.2–0.5 = medium change and $d > 0.8$ = large change (Cohen, 1988; Thomas, Nelson & Silverman, 2011). Statistical processing was performed by the Statistica programme, v. 10.0 (Statistica, Tulsa, USA).

Results

Tables 2 and 3 present the main findings of the survey of life satisfaction in teachers and selected professions. Compared with other professions, overall life satisfaction in current teachers is very low. Even lower values were reached only by practical nurses (Table 2, Fig. 1). On the contrary, the highest values of overall life satisfaction were scored by medical doctors and managers. The category that mostly saturates the level of life satisfaction in current teachers is own children, followed by satisfaction in partnership and friends. Teachers' satisfaction with housing is also relatively high. Significantly lowest values were scored in the finance category. Compared with other professions, teachers reported the lowest values of subjective health assessment (Table 2, Fig. 1).

Table 2

Life satisfaction and its components in current teachers and selected profession groups

Live satisfaction	Teachers	Public servants	Practical nurses	Medical doctors	Sales representatives	Managers
Health	35.0 ± 6.51	36.9 ± 6.48	37.9 ± 7.01	37.4 ± 6.81	37.6 ± 7.52	35.1 ± 6.75
Work	35.8 ± 5.82	34.6 ± 6.57	33.8 ± 6.82	38.1 ± 5.34	38.2 ± 6.18	44.3 ± 4.12
Finance	30.1 ± 7.21	30.6 ± 8.11	27.5 ± 7.59	41.4 ± 5.27	34.7 ± 6.47	46.2 ± 3.07
Leisure time	35.5 ± 7.27	34.1 ± 7.65	31.5 ± 7.14	36.8 ± 6.58	34.9 ± 6.80	22.3 ± 7.10
Partnership	38.7 ± 8.71	39.1 ± 6.73	38.3 ± 7.56	34.9 ± 6.94	40.6 ± 5.89	31.4 ± 7.86
Child	41.2 ± 6.50	40.4 ± 5.27	40.4 ± 5.12	41.3 ± 5.23	40.7 ± 6.71	38.8 ± 6.97
Own person	35.2 ± 6.43	36.4 ± 5.52	34.7 ± 6.23	38.6 ± 5.67	36.6 ± 5.98	44.9 ± 4.65
Sexuality	35.1 ± 7.86	36.3 ± 6.99	36.8 ± 7.54	34.2 ± 7.82	40.8 ± 6.70	32.3 ± 7.26
Friends	37.3 ± 5.60	37.2 ± 4.93	35.7 ± 4.89	41.7 ± 4.53	36.4 ± 5.17	35.6 ± 5.84
Housing	37.4 ± 6.79	36.8 ± 6.39	36.2 ± 5.87	43.8 ± 5.47	37.5 ± 6.13	44.5 ± 4.92
TOTAL	244.4 ± 28.54	247.5 ± 34.03	240.2 ± 37.15	274.1 ± 23.42	258.9 ± 29.31	261.6 ± 21.19

A comparison of individual professions revealed minimum differences in overall life satisfaction as well as its individual components between teachers and public servants. A similar trend was observed in a comparison with practical nurses (Table 3). However, there was a significant difference in the area of satisfaction with leisure time. In this item teachers reported the highest degree of satisfaction. A comparison of overall life satisfaction between teachers and doctors revealed significantly higher values ($d = 1.72$) in doctors. In comparison with doctors, teachers are significantly less satisfied with finance, own person, friends and overall housing quality. A comparison of overall life satisfaction between teachers and sales representatives reported a material difference of a medium significance ($d = 0.510$) in terms of a higher degree of satisfaction in sales representatives. Significant differences were observed in two more items. Sales representatives were more satisfied in the area of finance and sexuality (Table 3). The highest number of significant differences was observed in a comparison of teachers and managers. Managers are in general significantly more satisfied ($d = 0.626$). Significant differences were also observed in life satisfaction of managers in the area of work, finance, own person and housing. On the contrary, significantly higher values of life satisfaction than managers were reported by teachers in the area of leisure time and partnership (Table 3).

Table 3

Effect size (Cohen's *d*) of differences in life satisfaction components in teachers and selected profession groups

Effect size (Cohen's d)	Teachers × Public servants	Teachers × Practical nurses	Teachers × Medical doctors	Teachers × Sales representatives	Teachers × Managers
Health	0.292	0.436	0.366	0.387	0.015
Work	0.197	0.328	0.401	0.407	1.523**
Finance	0.066	0.356	1.635**	0.651*	2.398**
Leisure time	0.189	0.553*	0.182	0.084	1.823**
Partnership	0.049	0.048	0.451	0.231	0.851**
Child	0.131	0.130	0.016	0.076	0.365
Own person	0.196	0.078	0.539*	0.221	1.570**
Sexuality	0.158	0.219	0.115	0.746*	0.361
Friends	0.019	0.295	0.811**	0.163	0.301
Housing	0.090	0.183	0.973**	0.015	1.088**
TOTAL	0.102	0.135	1.072**	0.510*	0.626*

Legend: * – effect size significance (medium effect); ** – effect size significance (large effect)

Discussion

In our research we focused primarily on the assessment of own life satisfaction and its components in teachers compared with selected profession groups. As mentioned in the introduction, literary sources are not in agreement as far as the definition of life satisfaction is concerned. There are several definitions of life satisfaction, e. g. 'well-being', 'subjective well-being' or 'quality of life'. In our paper we mostly adhere to well-being.

Life satisfaction is influenced by a number factors, most frequently age, gender, health and work. In relation to work Hnilica (in Payne, 2005) speaks of the possibility to influence work as such. Individuals are more satisfied with work if they have more control over their work and if their work is less mentally demanding. It was confirmed that a higher degree of an employee's control is correlated with a feeling of higher mental demands. Control over work is characterized by work autonomy, possibility to apply own competences and interests and possibility of personal development. Work satisfaction does not have a direct effect on overall satisfaction, its influence is defined by the degree of control. A significant predictor of life satisfaction is represented by health. Despite this fact the relationship between satisfaction and health and the above mentioned work satisfaction are relatively independent areas. Satisfaction or dissatisfaction in either of them does not influence the other area. Satisfaction with health,

contrary to work satisfaction, has a direct effect on overall life satisfaction and quality of life. Some authors even claim that it is a stronger predictor of life satisfaction than social support and partnerships (Kebza & Šolcová 2005).

With respect to gender differences Hnilica (in Payne, 2005) claims that men are more satisfied than women in the most important areas of their lives (partnerships and work) as well as their lives in general. In terms of the influence of age in both genders, there is a slight linear decrease in satisfaction with age, minimum is reached around fifty years of age. During this stage there is a decrease in both overall life satisfaction and satisfaction with partnership and sexuality. Satisfaction with health decreases between fifty and sixty years of age, while the significance of health as such increases. The significance of satisfaction with marriage, partnership and sexuality decreases after seventy years of age. In overall terms, life satisfaction is strongly associated with work, existence of a partnership, positive self-assessment, good income and absence of anxiety and depression (Beutel et al., 2009). In men there is a decrease in satisfaction with sexuality with age, particularly after sixty years of age. At the same time, there is a slight increase in satisfaction in the area of partnership (Beutel et al., 2010). In spite of this fact, age does not have to be a clear criterion. Some studies indicate that life satisfaction in men in the area of leisure time, partnership, sexuality, own person and social integration is very similar around forty to forty-seven years of age, and in men over fifty years of age until about sixty-five. On the contrary, the period between forty-eight and fifty-five is typical for a decreased level of life satisfaction and its components (Seikowski, Stöbe, & Harth, 2008). Women tend to be most satisfied with family life and children. In overall terms, main gender differences in life satisfaction are in the areas of health, finance and family life (Daig et al., 2009).

In the context of our study, the issue of current life satisfaction and its components is analysed for various professions. The principal monitored profession is current teachers. For practical reasons we performed a comparison with individuals of the following positions: public servant, practical nurse, sales representative, manager and medical doctor.

In terms of life satisfaction, the monitored group of teachers reported lower values than reference standard values. Compared with selected professions, current teachers reported almost the lowest values of overall life satisfaction (Fig. 1). The lowest values of overall life satisfaction, even lower than teachers, were scored by practical nurses. The highest values scored by teachers were in the item of satisfaction with own children and in the area of partnership. In comparison with selected professions, teachers scored the lowest values in the item of subjective health assessment. The lowest values of life satisfaction for teachers were scored in the area of satisfaction with finance. This fact can be based on long-term concerns about financial difficulties because after more years of practice one wants to afford more than basic needs. Teachers usually satisfy just their basic needs, which corresponds with the impossibility to satisfy more demanding needs

in terms of finance. In overall terms, there is a trend of significantly lower life satisfaction of teachers and employees in the public sector and state administration (practical nurses, public servants) compared with private sector professions (medical doctors, sales representatives, managers) (Fig. 1). Similar conclusions were stated by Vašina (1999), who investigated occupational satisfaction of teachers in basic and secondary schools in comparison with occupational satisfaction of bankers or HR employees. The teaching profession had significantly lower satisfaction.

In terms of overall life satisfaction, the highest level was observed in medical doctors. Individuals in this profession group did not show considerable dissatisfaction in any of the areas, on the contrary, their life satisfaction is more significant in several areas. Individuals in this sample have all qualifications and longer experience, which might have an effect on their life satisfaction and its components.

A relatively high life satisfaction was reported by the sample of managers although the structure is somewhat specific. In terms of life satisfaction managers are significantly satisfied in the area of work and employment, finance and housing. Similarly, Mikšík (2009) in his study aimed at the correlation between the attitudes to life reality and the nature and type of occupation revealed that managers of international business companies and leading public administration employees are significantly satisfied with material provisions. However, as early as 1960s it was becoming evident that continuous economic growth does not lead to increased life satisfaction but rather to increased demands that cannot be always satisfied. Hošek (2001) speaks of a hypertrophy of an individual's needs, as a result of which an individual becomes more vulnerable. The analysis of the results of our sample of managers indicates that the items of finance and housing are significantly increased and to a large extent contribute to the results of their overall life satisfaction. In the categories of finance and housing managers reported significantly higher values of life satisfaction also compared with standard values. From a psychological viewpoint it would be desirable to achieve a balance between work and private life. This idea is also supported by the results of an international study carried out in 33 countries investigating whether managers can have 'private life and career' at the same time. It was revealed that those managers who were able to maintain a balance between work and private life were assessed as individuals with a higher career potential than those purely work-oriented (Lyness & Judiesch, 2008).

Figure 1
Overall life satisfaction in teachers and selected profession groups
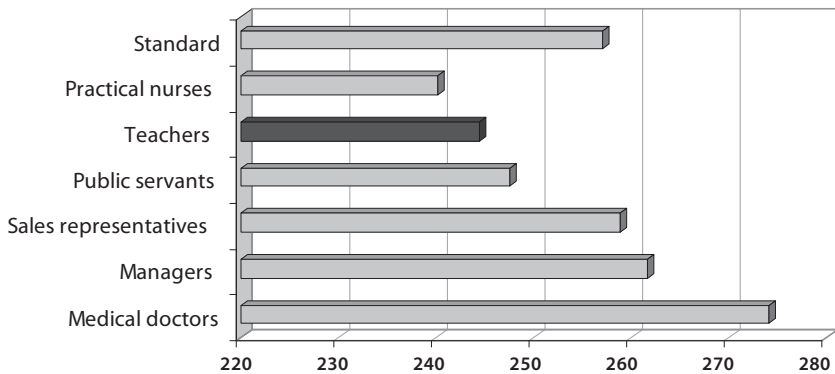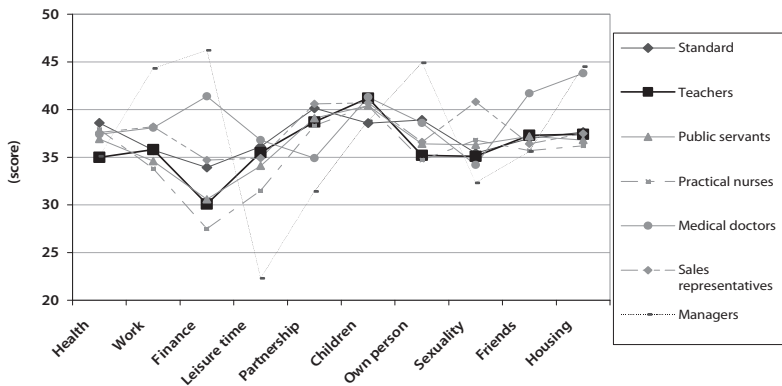

Figure 2
Structure of life satisfaction in teachers and selected profession groups

Another sample our research focused on sales representatives. Individuals in this sample are most satisfied with work, partnership, own children and sexuality. In other monitored items of life satisfaction they scored average and there is no area in which their life satisfaction would be particularly low. In terms of overall life satisfaction, the sample of sales representatives reported considerable values (Table 3). With respect to individual components, sales representatives are significantly more satisfied than teachers in the

area of finance and sexuality. The content of their work, overall organization, certain autonomy and material conditions can form a basis for a higher degree of life satisfaction in sales representatives than teachers. On the contrary, teachers' jobs have a relatively stable structure, their place of work is stable, their work autonomy is limited by the system and the school environment, their material conditions do not match those of sales representatives. Financial evaluation with motivation components considerably differs between those two groups. The facts mentioned above can influence the overall level of life satisfaction and its components in the context of comparing sales representatives and teachers.

The sample of public servants reported a lower index of overall life satisfaction compared with average standard values. In comparison with teachers, their overall life satisfaction is significantly higher. In terms of the different components, public servants scored highest in the areas of children, partnership and friends. On the contrary, the lowest values were observed in finance, leisure time and work. An analysis of the curves in a line chart (Fig. 2) indicates that in terms of the monitored components of life satisfaction, public servants are closest to teachers.

In overall terms, the lowest life satisfaction was observed in the sample of practical nurses. Practical nurses are relatively satisfied in the social domain, which is represented in this survey by the relationship with own children. However, practical nurses are dissatisfied with economic aspects, i. e. finance. The level of satisfaction in this area is the lowest of all monitored samples. The financial evaluation of practical nurses does not often meet the workload and time spent at work. This might be the cause of their frustration in this area. According to Müllerová (2007), a nurse should introduce a patient into a treatment facility, explain unknown things, advise on the regime, facilitate overall orientation of the patient. A nurse should also try to reduce negative emotions (fear, shyness, anxiety, hopelessness) and establish an involved personal relationship with the patient, express interest. Last but not least a nurse should actively cooperate with, encourage and activate the patient. All this makes the profession of a nurse very demanding and exhausting. In spite of that, this profession can provide a certain degree of life satisfaction. In some individuals this profession can saturate the degree of work satisfaction significantly more than the overall level of life satisfaction, irrespective of age (Kliszcz et al., 2004). These facts can be further accented in cases of positive interpersonal relationships (Lee, Kang, & Kim, 2007).

Optimum interpersonal relationships and a social climate in general contribute to both work satisfaction and life satisfaction, this particularly applies to professions that include frequent personal contact. This category includes teachers analysed in our survey. The teaching profession is a relatively specific and stable social and profession group. Teachers work with children and youth and influence them in terms of education and morals; therefore, it is desirable that their satisfaction be at least acceptable. Teachers' life satisfaction is then reflected in work satisfaction and thus in work with the target group, i. e. children.

The survey is of a pilot nature and provides space for further research studies in the area of life satisfaction of various profession groups.

Conclusions

The present paper focuses on the assessment of the current state of life satisfaction and its components in current teachers in comparison with selected profession groups. The research study included a total of 544 adults of various professions, of which 213 were teachers. The aim of the research plan was to contribute to understanding the aspects that currently influence life and work satisfaction of basic school teachers. The conclusions of the research study are as follows:

– Current teachers reported lower values of overall life satisfaction than average reference values,
– Compared with selected professions, teachers reported almost the lowest values of overall life satisfaction,
– Lower values of overall life satisfaction compared with teachers were scored only by medium-level health professionals,
– The highest values in teachers were scored in the item of satisfaction with own children and partnership,
– Of all selected professions, teachers scored lowest in the item of subjective health assessment,
– The lowest values of teachers' life satisfaction was reported in the item of finance,
– In overall terms, there is a trend of significantly lower level of life satisfaction in public sector and state administration employees (teachers, practical nurses, public servants) in comparison with private sector professions (medical doctors, sales representatives, managers).

With respect to the overall design, the research is of a pilot nature and provides space for the development of hypotheses and their verification in subsequent research studies.

Acknowledgement

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Approaches to the Development of a Child's Personality According to Carl R. Rogers

Eva Šmelová

Abstract

The aim of the paper is to introduce some of the thoughts of an American psychologist Carl R. Rogers, known especially for his non-directive approach in psychotherapy. Rogers' thoughts influenced not only treatment but also the area of pedagogy, where he promotes natural and peaceful education, authenticity and self-fulfilment. In his work, he addressed the issues relating to the development of freedom of learning through various approaches and strategies.

The contemporary preschool education is undergoing a transformation process, whose objective is to establish approaches to a child as an active subject, who is developed with respect to own potentialities, needs and interests, in a supportive environment with an atmosphere of freedom.

The paper deals with educator approaches verified by research as the most effective methods of learning facilitation, and with strategies according to Rogers. The paper describes approaches that can be well implemented into the work of preschool educators and can enrich the repertoire of their facilitation approaches, which encourage appropriate children's activities, learning, thinking, self-understanding and understanding the surrounding environment.

Keywords: kindergarten teacher, preschool education, learning, preschool child, non-directive approach, freedom, experiential learning, congruence, empathy, acceptance.

Introduction

Before 1990, preschool education in the Czech Republic primarily focused on children education through a predetermined content. Such content was presented by the teacher primarily by means of collective work, i. e. in a frontal manner. In these types of controlled joint activities, children were left with a minimum space for freedom. The teacher had to follow not only the content but also the programme of activities. Obviously, these conditions did not respect individual children's needs. After 1989 this approach was strongly criticized by teachers themselves, as it was unsuitable not only for the child but also for own creative educational work.

Since 1990 there have been efforts to develop a new approach to children associated with pedagogical thinking and turning to the legacy of the humanistic school of psychology, where the child's freedom is in the forefront. These schools become the source of personalistic theories. Their development was influenced by the work of educators at the beginning of 20th century. One of them was *M. Montessori*, who devised an approach to child-centred education, as expressed by her known credo: *"Help me do it."*

The personalistic theories were also inspired by personalistic psychology, which reacted to deterministic psychology trends based on a concept that a human is controlled by the unconscious or his living environment. The effort was to bridge the gap between two psychology theories with the power of the unconscious on the one hand and the influence of the surrounding environment on the other. The aim was to highlight the interaction personality concept which was later identified as personalistic psychology. A significant figure was *A. Maslow*, who together with other researchers developed a new picture of a human being with innate love and own fulfilment contributing to the good of the whole society. Another source of personalistic theories is the work by K. Lewin, father of the dynamic theory of personality. Under the above mentioned thoughts the following two movements originated:
– pedagogical approaches focusing on the development of affectiveness through non-directive strategies,
– pedagogical approaches focusing on the development of creativity through direct intervention strategies, (Bertrand, 1998, p. 44–47).

Rogers is a representative of non-directive strategies. He is the founder of psychotherapy, which is based on a non-directive (non-manipulative) and relationship-based approach to helping people through psychological instruments. (Vymětal in Baštecká 2009, p. 324) The Rogers' approach is used not only in treatment but also the area of humanistic pedagogy, where he promotes natural and peaceful education, authenticity and self-fulfilment. The teacher-student relationship changes; it becomes less directive and is based on mutual respect and understanding. (Průcha et al. 2009, p. 93) To a large extent, the mentioned approaches correspond with the current requirements of the

preschool curriculum. The question is however, to what extent and which approaches recommended by Rogers can be appropriately used in preschool education.

1 Human centred approach

Speaking of the relationship between the educated and the educator, these two are usually assigned different roles: *the subject and object of education*. In today's educational concept, this relationship is rather an external phenomenal matter because during the course of this interaction *the roles are exchanged*. The object of education is also the subject, irrespective of the individual's level of maturity. Incorrect understanding of this relationship results in the dominance of the adult individual as the subject of education; this individual becomes a manipulator, does not allow communication or free expression of the object, i.e. the educated. The consequence of this unhealthy relationship is insufficient development of potential pedagogical, individual and social subjectivity. External efforts of educators should encourage and direct the internal conscious *self-formation* of the educated and lead them to a transition to *self-educators and educators* of others. (Blížkovský 1992, p. 34–35)

The human-centred approach is not mere learning certain behavioural techniques; it also encompasses the area of approaches and interpersonal relationships. *"The human-centred approach is primarily a way of being, which is reflected in the attitudes and ways of conduct comprising a growth-promoting climate. This is rather a philosophy than a technique or method. Living by this philosophy helps humans develop their own capacities. If this philosophy is lived out, it also stimulates constructive transitions in others. It gives humans strength and our experience shows that if this strength is felt, the development is directed towards personal and social changes."* (Nykl 2012, p. 31)

The core of this approach is based on the following attitudes: ***acceptance, empathy and congruence***, which is the basis of *Rogers' non-directiveness*. His approach cannot be limited just to the mentioned variables. The *Rogers' theory* encompasses a number of other aspects: extensive theory of personality and behaviour, definition of multiple concepts, self-theory (structure and differentiation of mental processes), definition of the causes of mental disorders, detachment from clinical diagnosis, application of this approach in education, etc. The theory is based on an own humanistic concept of the image of man, which was in contradiction to psychoanalysis and behaviourism. *Rogers* believed that every man has a rich intrinsic mental potential, which is released and developed under suitable conditions towards *self-understanding, understanding and acceptance of own environment and constructive changes in relationships and conduct*. Each individual has a need not only to take but also to give, perceive others in the surrounding environment and be perceived, develop, be able to assess oneself.

For example, the relationship between the mother and her child is characterized by strong emotions, closeness, understanding, empathy, communication, etc. Being able to empathise is directly associated with self-knowledge, the level of which depends on *personal maturity and internal stability*. The level of empathy reflects willingness to empathise, ability to accept another person and being verbally skilful. An emphatic adult promotes children's feelings of subjective closeness and trust. A sincere interest of an adult in a child, understanding and closeness develop a feeling of safety, integrate and promote the development of the child's self-respect. For a child, an adult is a model of understanding behaviour, which promotes and increases the child's self-empathy. An adult's empathy has a positive effect in terms of *relationships, emotions and cognition*. It leads to changes in self-conception, and in overcoming *incongruences* (internal conflicts). The foundations of developed forms of empathy are laid in childhood.

Empathy is developed especially in social interaction and in the relationship between a child and an adult from birth, all this on the basis of congenital predispositions of various levels. The first stage of the development of empathy is *"pre-empathy"*, which is characterized by an involved emotional reaction, sensational communion, emotional contagion and assumption of feeling; for example a reaction of a child to another child crying. Another type of *assumption of feeling* can occur when a differentiated emotional reaction or a permanent condition of a close person from a child's environment induces identical feelings in the child. A significant aspect in the development and cultivation of empathy is quality interaction, in which *subjectivity emerges from inter-subjectivity*. As it turns out, highly emphatic individuals are internally stable and have a higher level of self-knowledge, positive and helpful relationship with other people. A quality and inspiring interaction between a child and the teacher requires winning the child's trust, which is associated with being *authentic*. *Authenticity* is a significant personality feature reflected in sincere behaviour, being oneself, act without pretending. It is important to be authentic not only with respect to other people but also with respect to oneself. (Nykl, 2012, p. 90–92)

Congruence is another significant attitude in developing a relationship of mental growth. It represents an agreement between internal experiencing and external behaviour. This agreement is significant for healthy mental development, ability to communicate and healthy interpersonal relationships. Sometimes this balance is disrupted, which might be associated with prejudice or conventions. In that case, what adults say and do differs from what they think, which may lead children to non-authentic conduct. Children come to kindergarten with certain habits and behaviour, which may not be in line with the requirements for proper behaviour in kindergarten. Under the influence of these situations, children behave *non-authentically and are led to pretence by their parents*. For the child such behaviour presents a degree of load. Gradually, behavioural norms and rules are adopted that the child cannot identify with and it is difficult for

the child to comprehend such situation. Non-authentic behaviour can be induced not only by the family but also kindergarten.

Congruence in the *Rogers'* concept involves experiencing and awareness free from strict constructs, internal undistorted symbolization of experiencing, social and transparent expression towards another person, the fact that an individual is capable of living a fulfilling sense in a relationship. (Čáp, Mareš 2007, p. 355)

A need in interpersonal relationships is true sincerity and an ability to live out actual feelings and attitudes. If a child feels unundestood, openness cannot be expected. For example, children also assume the teacher's attitude to another child. Children do not want to play with a reprimanded child and express rejection. A rejected child becomes withdrawn or can behave aggressively and deliberately draws attention by inappropriate behaviour. It might be concluded that it is impossible to build relationships without empathy and congruence.

As *Rogers* aptly says: *"I find I am limited in some situations, I do something badly or I ridicule myself. I can highlight these traits if they occur during an interaction. If a therapist is himself and expresses openly, he frees us from numerous restraints and affectations and allows a client to establish a contact with another human being in the most pleasant way."* (Nykl 2012, p. 38)

The basic attitudes of the teacher-facilitator as considered by Rogers include *trust in man, experiencing uncertainty of discovering, research-based evidence, student-based evidence and effect on the teacher*.

Should we work with children we should believe in developing their potentialities and provide them with a space for a free educational selection, through which children are educated. The educator should develop the child through his/her interests, respecting individual possibilities and needs. Educators are often convinced that they need to guide the children at all times according to what they think is best. As a result, children are often manipulated irrespective of their individual interests and needs.

The teacher can show trust in the child by providing the *"freedom to learn"*, i. e. respect for individual peculiarities. And by creating conditions for experimenting, discovering, cognition, which makes learning an everyday enjoyable part of the child's life.

As *Rogers* aptly says: *"If we want to have citizens who are able to live in this kaleidoscopically changing world in a constructivist way, we need to free our children so that they can start to learn independently. This type of a learning individual can well develop into a facilitator promoting human growth."* (Rogers 1998, p. 178–195)

For a child's development it is necessary to provide a stimulating environment, which is the task of kindergarten teachers. A significant aspect according to *Rogers* is *centred care of the teacher for his/her own class*, which strengthens facilitating conditions required for encouraging children's activities in a cooperative learning environment. (Rogers 1998, p. 268)

The following table compares some forms of behaviour in a teacher centred class or human-facilitator centred class according to *Rogers*. The last part of the table includes the application of a human-facilitator centred environment in kindergarten.

Table 1
Comparison of discipline in a teacher centred class and human-facilitator centred class

Comparison of discipline in a teacher centred class and human-facilitator centred class		
Teacher centred class	**Human centred class**	**Application in kindergartens** (the level can be reached as early as in older preschool children)
The teacher is the only leader	Joint leading	Joint leading
Leading in the form of supervision	Leading in the form of guiding	Leading in the form of guiding The teacher creates necessary conditions. Children address various tasks, select activities that are of interest. Emphasis on the child's experience.
The teacher sets the rules	The teacher sets the rules together with the children.	The teacher sets the rules together with the children. The rules are not only set and observed jointly by the children but also assessed in the context of self-reflection of own conduct and conduct of others.
Rewards are mostly extrinsic	Rewards are mostly intrinsic	Rewards are mostly intrinsic. The teacher uses especially praise and other methods, e. g. task assignment, etc.
The teacher has only a few helpers among the pupils	All pupils have an opportunity to become an integral part of taking care of the class.	All children have an opportunity to become an integral part of taking care of the class.

2 Experiential learning according to Carl R. Rogers

Preschool education uses *spontaneous as well as controlled activities that are interconnected and balanced,* whose proportion corresponds with the needs and possibilities of a preschool child. A specific form suitable for preschool education is a *didactically oriented activity directly or indirectly motivated by the educator*, which includes both spontaneous and deliberate (targeted, planned) learning. (RVP PV 2004)

Natural features of a preschool child are curiosity, endeavour to explore, discover, and experiment, all of which lead to learning. Then it depends on the conditions and the educator whether the learning process is supported or limited.

Rogers distinguishes two types of learning:
– learning that engages the mind, without feelings, personal significance, with no associations with the whole person,
– experiential learning.

In preschool age experiential learning has a significant position because it is easier for children to remember what is directly associated with a specific object or activity, i. e. experience. Storing any knowledge in the memory is also influenced by the degree of awareness of a specific area.

According to *Rogers* experiential learning is characterized by the following: *quality of personal experience, own initiative, penetrance, assessment of experience and its significance for the learner*. (Rogers 1998, p. 215)

The quality of personal experience is associated with emotional as well as cognitive aspects of a child's personality. For a preschool child a majority of experience is associated with an actual situation related to satisfaction or dissatisfaction. A significant role in controlled activities is played by extrinsic motivation, which then transforms into internal feelings.

The quality of learning is associated with the meaningfulness of a specific piece of knowledge, relationship to the child's life and the child's experiences. Processing of any new knowledge in the memory is influenced by the degree of the child's awareness of a specific area, which is a precondition for easier remembering.

In preschool children, the process of assessment is associated with emotional experiencing. A majority of experience at this age is associated with a specific situation related to satisfaction or dissatisfaction. (Vágnerová 2012, p. 219–221)

Assessment should not be performed solely by the teacher but space should be provided for the child's assessment and self-assessment, who is thus led to co-responsibility. *Rogers* emphasises the fact that education that provides space for the subject of learning brings deeper understanding and remembering. At the same time, the child's self-confidence is supported. According to *Rogers,* self-assessment is of primary importance; assessment of another person is of secondary importance. (Rogers 1998)

In recent years, a specialized type of active learning is used especially in science classes, i. e. discovering. The school curriculum of a number of contemporary kindergartens includes projects aimed at discovering, i. e. exploration. Teachers intentionally present elementary problems that children solve. These can be short-term as well as long-term projects. Teachers take the role of facilitators, whose primary task is to initiate appropriate activities, provide a suitable environment and offer children opportunities to find out, think, understand oneself and the environment. They become guides on the way to children's cognition. As mentioned by *Rogers*, a human-facilitator centred class shapes not only the children but also the teachers.

Conclusion

The reform of preschool education launched in the previous decade has not been completed yet. New requirements and legal amendments present mere regulations that introduced a number of changes into the work of schools, these changes often being non-conceptual. The new curriculum designed in compliance with current educational trends is not a guarantee of quality education. This can only be guaranteed by a qualified professional approach of the teachers to designing own work, and by acquiring new educational strategies based on the child and the child's needs. The transformation of kindergartens should be based on this principle. As indicated above, Rogers' personalistic approaches and strategies might be implemented in the work of kindergartens with respect to the specifics of preschool age and well connected with current knowledge presented by the followers of cognitive psychological (Piaget) and sociocognitive (Vygotský, Bruner) theories.

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Poetry in School – the Old Issues and New Challenges

Vlasta Řeřichová, Jaroslav Vala, Jana Sladová

Abstract

The study presents the progress and partial results of the longitudinal research phase of a project in which eight experimental classes participating in the teaching of poetry based on experiential learning and creativity of pupils were observed. The focus is on the results of the selected class of pupils at a primary school in the age group of 12–13 years, particularly 18 girls and 13 boys. Some of the methods used in the work with poetic texts were introduced focusing primarily on poetry perception by teachers and pupils. The results show that the experimental teaching activity appears to be particularly beneficial for the pupils with worse study results who had not initially had a positive relationship to poetry.

Key words: reception of poetry, pubescent readers, literary education, experiment

1 Introduction

The contemporary modern pedagogy – unlike the normative pedagogy the insights of which had prevailed in the educational process for more than two centuries developing a theoretical system tied primarily to the concepts of education and training – conceives the process of education in a broader context. It includes the whole complex of educational phenomena as well as processes operating outside the school environment. The educational process in our research emphasizes the work with poetic texts and

highlights their specificities. These texts can serve teachers as an educational resource to achieve defined educational objectives, but also as a behaviour development tool using the educational model of indirect teaching activities which through experience in a particular teaching situation shapes not only the cognitive, but also the emotional aspect of personality (Pelikán, 2009). For this indirect effect the emotions of pupils is particularly significant as well as the process of creating their own personal experiences.

This study presents the progress and partial results of the longitudinal research phase of pubescent poetry readers in eight experimental classes where teaching of poetry was based on experiential learning and creativity of pupils (Vala, 2013). The focus was on the results of the pupils from selected classes of primary schools in the age group of 12–13 years, particularly 18 girls and 13 boys. Some of the methods were introduced with the focus mainly on the perception of the process by teachers and pupils. The control class consisted of 12 girls and 9 boys.

2 Theoretical basis

The theoretical basis of the research is the theory of didactic content knowledge proposed by Shulman (1987) as one of the fundamental knowledge bases of teachers. It indicates a specific combination of several components that teachers use to shape their subjective knowledge into a form suitable for teaching. The key role that is of interest to researchers is attributed to transformation processes through which teachers' content knowledge changes into the content knowledge suitable for teaching, i. e. the didactic content knowledge. In teachers' education, the emphasis must be on what subject matter is selected to teach and why a specific curriculum is taught in this one particular way.

As indicated by Janík, Lokajíčková and Janko (2012), the quality of teaching cannot be described simply by listing its characteristics, i. e. that teaching should be clear, structured, activating, etc. It is necessary to specify what the listed adjectives refer to.

As one of the main components of the quality teaching the authors reported learning tasks involving the activation of cognitive function. The general concept of learning tasks calls for active pupil learning activities; based on the subject they move towards the goal of learning; they establish an educational situation determining its form, organization and process (Slavík, Dytrtová, Fulková, 2010). Without learning tasks teaching would lose its own content. In literary education the role of learning tasks is played predominantly by literary texts.

Working with poetic texts in school and seeking ways to make poetry accessible for adolescent readers has been a long-standing and always relevant issue of literary education in schools. According to Vala (2011), poetry in the contemporary school has a difficult position being perceived as incomprehensible by pupils and removed from their life experience, and – as a result of today's pragmatic view focusing on applicability

of acquired knowledge and skills – considered unnecessary. A lack of pupils' interest in poetry demonstrated by our own and foreign research (Wiseman, 2011; Hanratty, 2012), or even dislike of it are often exacerbated by stereotypical approaches of teachers who prefer a pre-determined and unequivocal answers not allowing the poem to become a living component of didactic communication. A separate issue is the relationship some teachers have with poetry which is influenced, among other things, by their own uncertainty and fear about potential issues associated with interpretation ambiguity of poetic texts (Ofsted, 2007; Vala, 2012; Lambirth et al., 2012). Another factor affecting the work with poetry in schools is a frequent reluctance of pubescents to communicate their feelings concerning poetic text resulting from the fear that their opinion will differ from the opinion of their classmates (Homolová, 2008). Gejgušová (2009) also points out that in the present tough and merciless environment printed text competes with video and audio communication with reading often losing in the conflict.

In the context of the outcomes formulated by the Framework Educational Programme for Basic Education and the framework educational programs for secondary schools these facts became the basis of the project GA CR P407/11/0594 Analysis of Readers' Reception of Poetic Texts in Adolescent Readers. The pupils' (ages 12–19) perception of poetry was investigated as well as the possibilities of influencing the relationship by teaching methods. The implemented longitudinal intervention study allows us to predict the effects of a specific way of presenting the curriculum, it connects the pupils' world with the subject and shows ways of a sensitive guidance of the reflections and discussions related to learning tasks (in this case to poems). This fulfils one of the requirements for a development of the knowledge base of teachers based on didactic content knowledge, especially on the ability to transform the subject knowledge into a form acceptable to pupils.

The teachers involved in the longitudinal project had received twenty ideas for their lessons to choose from (and possibly modify to suit their needs) to try out in their classes. In addition to these subjects they were given five activities described in a detail that were supposed to be implemented (some repeatedly) before the end of 2011 in every experimental class:

* *What is a poem – a research in the experimental classes according to specified criteria*
  We strive to make pupils think about the essence of poetry; about their own internal definition which they can check when assessing 14 different texts.
* *Filling the missing words (or verses) into poetic texts*
  This activity is understood as a preparation for writing one's own poetry. Pupils' work is compared with the original, semantic shifts are observed and pupils' reflections recorded.
* *Coming repeatedly back to a more challenging text*
  Select a motivating, provocative, mysterious poetic text without the author and title with pupils recording their reading responses under different circumstances:

a) immediately after reading the text;
b) after discussing the text with classmates (without comments offered by teachers);
c) after obtaining information about the author, time and circumstances of writing of the poem.

• *Converting the poem into prose and back*
The role of pupils is to realize, through the comparison of different forms of formal poetry, the basic attributes of poetry.

• *Poetry writing*
Pupils should be guaranteed anonymity, later they can declare themselves as authors of their work. The involvement of the entire class in the evaluation of the texts proves beneficial. The diaries provide their reflection of the activity. Pupils write down their impressions after the task and again after the evaluation of results.

3 Research Methodology

Due to the given topic a mixed design research was utilized. The quantitative part was based on the results of the survey mapping the shift in the pupils' perception of poetry, methods of teaching and reflections of their teachers. In the experimental class the work on the project was launched (pre-tested) and finalized (post-tested) by a questionnaire in which the respondents recorded on a five point scale their agreement or disagreement with a series of statements related to poetry and the methods of teaching, not only in terms of reading preferences or reception of poetic text, but also from the perspective of literary communication. The questionnaire therefore investigated the pupils' preconcepts in relation to poetry and its teaching and showed which pupils' attitudes are easier to influence by appropriate teaching. The same questionnaire was completed by the pupils in the control class where standard instruction was implemented.

Similarly to the research conducted by Wiseman (2011), the qualitative line of our research focused on the analysis of the pupils' own work and personal diaries each pupil was keeping during the implementation of the research. The diaries summarized an overview of the tasks, applied teaching methods and forms of schoolwork, but they registered authentic material consisting of observations, impressions, and structures of thought and creative achievements of the monitored pupils as well. A part of the qualitative research line was in the form of interviews with teachers and their written reflection of the implemented teaching.

The longitudinal research started in March 2011, initially in eight classrooms (both at primary and secondary level). They served as experimental classes, i. e. in these classes the literary education was taught according to our plan focusing in detail on the work

with poetic texts. Concurrently, there was the standard instruction implemented in control classes where teachers continued to teach in their standard way. However, during the implementation of the experimental teaching process cooperation with three of the schools had been terminated due to changes of personnel or inability of the teachers to implement experimental teaching and incorporate its elements into their standard teaching process. The research had lasted 16 months and was completed in June 2012.

4 Process and results of the qualitative line of the research in the experimental class (ages 12–13)

In this section selected teaching activities are described as well as their adoption by the pupils and their teacher, and their diaries and creative achievements are analysed. Special attention is given to those pupils whose positive or negative changes in relation to poetry and its teaching have been significant.

4.1 Internal definition of poetry

During the initial activity of the experimental class the pupils assessed 14 short texts (including a nursery rhyme, rhyming shopping list, a poem converted into prose etc.) with the aim of establishing their view of a poetic text. The intention was to make them think about the essence of poetry and enable them to develop their own internal definition of poetry which they should later try to explain, as a sort of game, to an alien who had never read any poem. The task had presented the pupils with some difficulties, they suggested rhyme, similarly to foreign pupils in a similar research (Certo et al., 2010), as the primary significant feature of poetry. In several cases they mentioned a verse or verses arranged in stanzas and occasionally rhythm. Very few of them related poems to emotional experience *(it must be pleasant, should be funny, moving)*, in their terms, however, the term *pleasant* often coincided with the concept of rhymes. Only exceptionally the children acknowledged other aspects of the poem than the feelings poetic texts inspire in recipients, admitting that a poem can have a deeper meaning. They were, however, able to express this dimension of poetry in very simple terms and inaccurately *(a poem text is a rhyming text, expressing feelings; it is something that rhymes and moves us)*.

4.2 Filling in missing words in poems

The further activities of the pupils included filling in missing words in the poems by V. Holan *The Last Leaf*, M. Černík's *Each bird has its own song* and M. Jirous's *The little clouds asked the heaven*. The most difficult part for the pupils was filling in the gaps in the poem by V. Holan. The poem, with its title and the name of the author deleted, was adjusted so that the pupils could, while preserving the overall atmosphere of the text, use their imagination and creativity as much as possible. The underlined words were omitted in the text.

Vladimír Holan – The Last Leaf
The last leaf trembles on the plane-tree
For it knows well that without shaking there is no firmness.
I tremble, God, because I feel
I shall soon die and should be firm.
From every tree falls the last leaf
For it is not without faith in the earth.
From every man falls the last pretence
For the mortuary slab is utterly simple.
The leaf has no need to ask you, God, for anything –
You made it grow and it has not spoilt Your hand.
But I…

This task was difficult for pupils, however their comments in the reading diaries suggested that the work was interesting and significantly motivating: *I really liked this task, I enjoyed it a lot because we had a good laugh, when we were inventing funny words that would have fitted but were not making much sense. Super. If we write this ever again, my head will burst, but otherwise it was good. It was quite funny and interesting trying something new.*

A deeper insight into the way of solving the task is offered by a more detailed characteristics of the children (and an analysis of their work and reflections), based on the entry questionnaire they seemed to be non-readers with a significantly negative relationship to poetry, but the exit questionnaire had shown a significant positive change in their attitude to poetry. Further characteristics of the pupils were provided by their teacher:

- **Jakub D.** is in the Czech language classified by the grade 4, he comes from a socially disadvantaged family, he is insecure and unassertive when dealing with classmates and adults, his mental problems require outpatient treatment at children psychiatry ward. Some of his answers in the entry questionnaire were surprisingly clear and definite. Reading books is not a useful activity for him, he does not like poems but admits that their reading can be important to someone. He believes that poetry

has no meaning nowadays and clearly declares his opposition to it. He states that the poems often seem incomprehensible and feels insecure when working with poetry, he does not expect that reading poetry could bring satisfaction to anyone and cannot imagine himself writing a poem. Not surprisingly, he added to V. Holan's text just a few words which are completely beyond the meaning of the poem and the syntactic structure of the verses *(For it knows well that without <u>did</u> there is no firmness. I <u>guess</u>, God, because I feel … From every man falls the last <u>luck</u> …)*. Like some other pupils he connects the last verse of the existence of God with the gift of life, however, he was unable to detect the point of it.

- **Tereza B.** is timid, suffering from inferiority complex, in a permanent opposition to her classmates and unable openly assert her opinion. In the subject of the Czech language she is classified by the grade 4. She believes that the poems are written for a small selected group of readers, she admits her distaste for poetry and the fact she does not understand it. When working with poetry she is insecure and not interested in the discussion of literary texts. These facts are clearly reflected in the outcome of the given task. The numerous corrections in her text show that she tried to find the most appropriate expressions but final versions testify to the fact that she was not able even to guess the basic meaning of the text, some of the additions are illogical and other superficial *(<u>The last</u> leaf <u>sits</u> on the plane-tree, For it knows well that without <u>being cheap</u> there is no firmness. … From every tree falls <u>the colourful leaf</u> …)*. Her utter helplessness is suggested by the words completing the last verse (*This is the end!*). After the completion of the task she wrote into her diary: *It's weird, nothing fits. I was completely lost.*

- **Sára N.** is classified by the grade 3 in the Czech language, at school she is quiet and timid. In the entry questionnaire she indicated that reading books was useful in life, but did not like to read herself (nor did her parents) and expressed unambiguous dislike of poetry. However, she acknowledged that poetry had some importance nowadays (selecting 3 on the five-point scale) and believed that in a few years she could understand some poems differently. Poems were often incomprehensible for her and the literary education did not inspire her to reading poetry. She univocally believed that reading of a poem could not bring her pleasure and categorically asserted that poetry was not important for her life. She completely refused the idea that he could have fun writing poems and did not want to present her views in the literary education. Although she had not filled in some missing words, the meaning of some verses was successfully completed *(I <u>tremble</u>, God, because I <u>think</u>…From every tree falls <u>the last leaf</u>…)*.

- **Martin P.** is a pupil diagnosed with Asperger syndrome. He is classified with the grade 3 in the Czech language, but he is very knowledgeable about natural sciences. Because of the diagnosis his social behaviour is non-appropriate for his age group, he has an issue with concentration. He is grateful for the attention of adults,

seeks out a chance to talk with them and he is very sensitive to the slightest praise. In view of the above characteristics of the pupil, it is not surprising that when interpreting the text he favours logical connections and the first verse of Holan's poems are completed by the words *The wise leaf trembles on the plane-tree, For it knows well that in old age there is no firmness…* He was one of the few pupils who tried to complete the conclusion *(You gave it life and it has appreciated Your hand).* In the diary he had summed up his impressions of this activity: *It's quite interesting, it needs a lot of thinking about, but it is not the best exercise we've done so far. I have missed all of it, it is very difficult.*

The most successful and meaningful text was provided by **Aneta V.**, she is a pupil with a significantly positive relationship to poetry. In the Czech language she is classified by the grade 2, but in lessons she is very quiet, introverted, shy and with a low self-confidence.

The colorful leaf trembles on the plane-tree
For it knows well that without youth there is no firmness.
I tremble, God, because I feel
I pray, I shall soon die and should be firm.
From every tree falls the strongest leaf
For it is not without faith in the earth.
From every man falls the last worry
For to believe is utterly simple.
The leaf has no need to ask you, God, for anything –
You gave it life and it has managed in Your hand.
But I…

When compared with Holan's poems, significant differences will stand out in the overall tone and meaning of the text, but there is no doubt that the pupil, although applying the text to her own images and life experiences, feels intuitively its depth and she is also capable to express her feelings appropriately (and in some cases without clichés). She described her feelings about this activity in the following words: *Some words were easier and some harder. The words had been easier before. I missed it completely.* Noteworthy is her statement: *There was a completely different atmosphere there.*

4.3 Writing one's own poem

The idea of writing their own poetry had initially caused uncertainty among the pupils *(When the teacher told us that we would write poems, I immediately thought about a topic. I have not figured it out yet. I do not mind it is mandatory, but I cannot do it.).* After

the implementation of this activity, the attitudes changed: *I liked inventing the verses.* (Jakub D.). Also Markéta Ch. stated in the entry questionnaire that she could not imagine she would create a poem. When given the task she wrote in her diary: *I had a very strange feeling, it seemed to me that it would not make any sense …* She, however, summed up her impressions after meeting the task: *I feel good about it, on the whole I enjoyed it, I would not mind repeating it*. Some pupils even handed over more then one suggested poem and in school they had together assessed the texts anonymously. The teacher's reflection shows that there had been a noticeable shift at this stage of the experiment in the relation of the children to poetry, the teacher considers it is remarkable that the most points were awarded to the poem written by a girl classified with the grade 4 in the Czech language. Dominik V. is one of the weaker pupils in the experimental class but his text deserves a special attention:

I MISS YOU…
I miss you very much,
What more can I ask for
Than to be with you,
In your shadow stand forever.

The benefit of this activity was not only a re-evaluation of pupils' own skills and confidence building. The children had also realized that some of their classmates who had not been expected to do very well created interesting poetic texts *(I liked it that the guys wrote nice poems as well. I did not expect that. So many pretty poems. I'm surprised that even the weaker pupils composed nice poems, I was very surprised. I was fascinated by some nice poems my classmates came up with, I am really surprised. Some poems are very good.)*. The authors of the best poems won a small prize and a diploma and two of them were published in the municipal newsletter. All the texts were illustrated in art lessons, bound and displayed in the local library reading room.

5 Progress and results of the quantitative research lines

The five-point scale was used for the respondents to record their agreement or disagreement with a series of statements relating to poetry, methods of teaching etc. There was a total of 33 monitored items. Three of these items (13, 23, 33) had only a complementary function and were not included in the final evaluation. In total 30 items from the questionnaire had been processesed. On a five-point scale this means that the average value of results reaches 90 points (an average evaluation by the five-point scale multiplied by the number of the items: 3×30). Lower values suggest a more positive attitude of the respondents to the monitored fields, higher values on the contrary

suggest a negative relationship. While the individual pupils' attitude in the control class to the monitored phenomena had remained without significant changes, there were significant shifts both towards the positive assessment and the negative assessment in the experimental class.

In Table 1 there are the names of 20 respondents involved in the project and arranged according to their shift in the perceptions of poetry resulting from the year-long experimental teaching. There are 10 respondents with the largest positive shift and 10 with the shift to the negative assessment.

Table 1
The order of the pupils from the experimental class according to their progress in relation to poetry and its teaching

Name	Input	Output	Difference
Jakub D.	133	103	30
Tereza B.	115	86	29
Sára N.	123	95	28
Martin P.	116	91	25
Markéta Ch.	117	96	21
Denisa P.	78	58	20
Ondřej K.	135	116	19
Tomáš B.	87	73	14
Michaela N.	135	123	12
Adéla T.	76	64	12
Pavlína Š.	98	106	−8
Eliška Z.	57	66	−9
Martin F.	77	87	−10
Martin K.	101	117	−16
Adam Š.	75	91	−16
Marika Ř.	97	120	−23
Veronika Ch.	88	114	−26
Aneta V.	76	105	−29
Dominik V.	72	112	−40
Štěpán J.	74	119	−45

The results of the questionnaire survey among the respondents indicate that the greatest shift recorded by the Table 1 concerns the pupils whose initial relationship could be described as a complete rejection. It can be assumed that the activating and creative work methods influenced their fear of poetry. Often they were amongst the weaker pupils (Jakub D., Tereza B., Sára N.), who were able to experience the feeling of success

which they otherwise did not know in school. On the other hand, significant deterioration was noted in the pupils who had boycotted the activities of the teacher or were not too keen to learn in general (Štěpán J., Dominik V., Veronika Ch.), or in the case of some quiet, introverted and insecure girls whose fear of failure was blocking their creativity (Aneta V., Marika Ř.).

Table 2

The correlation between the entry attitudes and intensity of their changes

Variable	Correlations – experimental class N = 29			
	Averages	Standard deviation	INPUT	DIFFERENCE
INPUT	97,17241	22,40068	1,0000	**0,57**
DIFFERENCE	−0,72414	20,26590	**0,57**	1,0000

Note: The marked correlations are significant at the level $p < 0,05000$

In Table 2, "DIFFERENCE" describes the difference between the established attitude to poetry at the beginning of the experiment (input) and after its completion. The input values capture pupils' attitudes to poetry before the start of the experiment. There was a statistically significant positive correlation shown between the variables "DIFFERENCE" and "INPUT" in the experimental class. The results of the correlation analysis can be interpreted in such a way that the higher difference values correspond to the higher input values. The pupils who at the beginning of the experiment did not show very good attitudes to poetry showed after its completion relatively frequent and substantial positive changes. The pupils who had declared at the beginning of the experiment positive attitudes to poetry did not show further positive changes and sometimes negative (undesirable) changes emerged on the completion of the experiment. It is evident from the diaries of the pupils and the observations of their teachers that the pupils have adopted a more realistic relationship to poetry. They ceased to view poetry as inaccessible art, on the contrary it has proved to be understandable and often enjoyable activity.

6 Conclusion

Although many of the tasks were difficult for the pupils, especially those activities in which they could use their own imagination and creativity, they perceived them as interesting and enjoyable. The feeling of success experienced during creative activities and the positive, friendly atmosphere made some of them change their originally declared attitude of resistance to poetry and realize that reading poetry could provide them with a pleasant experience.

The teacher described the experiment as a motivating one, the new methods allowing her to use new approaches not previously introduced in her poetry lessons: *The pupils have a better attitude to the work with poetry now, they are not afraid of it and I must admit that I, myself, am less "afraid" of poems and of teaching them. This is probably due to the fact that this experiment has brought up many suggestions for a different way of working with poems, which I frequently apply in my classes now. Even the pupils themselves, especially the younger ones, ask me to suggest a topic they could compose a poem on. When their "creations" are displayed on the bulletin board in the hallway or even printed in the municipal newsletter they definitely feel a great satisfaction.* The teacher also welcomed the opportunity – offered by the creative work – of insight into the pupils' feelings, moods and ideas resulting in better understanding.

A joint discussion of the texts and evaluation of pupils' poetic attempts have also contributed to the development of their social and personal skills and to a deeper understanding of the fact that mutual discussions and difference of opinion can be rewarding and some a priori judgments may not correspond to reality.

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Review

The Modern View of One Specific Didactic Phenomenon

Bohumil Novák

Žilková, K. (2013). *Teória a prax geometrických manipulácií v primárnom vzdelávaní. Theory and Practice of Geometric Manipulations in Primary Education.* Praha: Powerprint.

Constructivistically oriented pedagogical trends provide a theoretical basis and inspiration for the development of many partial and specific didactic problems in the teaching theory and practice of education in all the school grades. For example, in the context of pre-concept models and didactic theories in the reconstruction of educational environment they show significant study activities which are aimed at building schemes and representations in various disciplines and also in the didactics of mathematics and geometry. This also applies to the Czech educational environment. Katarína Žilková, a Slovak author, wrote an interesting monograph where she partially analyzed the issue.

The author wrote the publication as a monograph with two key interconnected topics. The two main chapters of the monograph are: *"Manipulating and Modeling"* and *"Research of the knowledge of quadrilaterals in students studying to become teachers."* The term manipulation is the main, important and unifying concept in the text in terms of student/child activity, leading to a systematic and deliberate development of geometric thinking. The interconnection of both parts of the monograph is assured by the educational content (geometric concepts and "how to understand them"), and from the point of view of "target groups" which there is a focus on. The target groups are primary school students and their (future) teachers.

Manipulating and modeling – this part mainly covers theoretical foundations. The subchapters called "The ways of modeling and manipulating and their divisions" and "The models in the context of cognitive process" are packed with information. The

author presents some schemes, models and representation in the development of thinking, reflecting relevant pedagogical and psychological concepts – Piaget's concept of stages in the evolution of intelligence, Bruner's representation of cognitive development and Bolzano-Popper's three "worlds". The author bases the monograph on these theories, even though she has her own view about manipulating activities and manipulating modeling as well as the newly used virtual environment and the virtual manipulation, but also about the level of the mental modeling and mental manipulation. The author also presents Hejný's word-formative structure process in mathematics and she points out connections between it and Van Hiele's five hierarchical levels of cognitive process in geometry.

The chapter called *Research of the knowledge of quadrilaterals in students studying to become teachers* is a summary study of the author, based on the necessary theoretical knowledge. The author then confronts her own outputs with the knowledge of foreign authors. The author defined the research problem set as a description and subsequent analysis of the properties of quadrilateral knowledge as one of the basic concepts of plane geometry based on a sample of students getting ready to become teachers in pre-primary and primary education in Slovakia and in some European countries (Scotland, Romania, Turkey). One of the findings of the author is that the respondents tend to understand the different categories of quadrangles as disjointed groups and they are not able to understand that some quadrangles are subsets of the others. As the author states, it is related to different didactic approaches in learning quadrangles and it is also related to their classification in textbooks, but it is also related to the specificity of its terminology. The research results indicate that the formation of geometrical concepts is a complex process, in which wrong and unstable concepts are often created. The author specifies and suggests a potential use in educational practice in some specific and useful handling activities that help to create a correct concept of rectangles, such as the folding and cutting paper or geoboard activities or interactive computer technology.

The point of view of the author of the monograph is modern. This confirms the fact that she is a distinctive, well shaped personality with the necessary knowledge in the field of didactic scientific research. The already critiqued monograph inspires further studies and thinking, and it shows challenges, which will be encountered on the way to knowledge.

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The Publication Special Education Teacher

Naďa Petrová

The publication Special education teacher was published last year at publisher Portál and introduces a new sub profession to readers. The publication is outlined as a monograph especially for beginning special education teachers, but also for directors, teachers, parents and students of special education programme. The publication offers theoretical and also practical knowledge of activities of special education teacher to readers.

The development of this publication was participated by collective of authors PhDr. PaedDr. Anna Kucharská, Ph.D., Mgr. Jana Mrázková, PaedDr. Renata Wolfová, PhDr. Václava Tomická, Ph.D., who have used their professional experience and their own experiences as a special education teacher or who have special experience with the methodological guidance of these specialists.

The publication is written in understandable language and is systematically divided into ten chapters. Readers have a comprehensive review about work of special education teacher, thanks to these findings from the experience of school consulting offices.

The publication is graphically well done, I appreciate the used contrasts, such as bold text, uppercase and lowercase letters, bright and dark lines that distinguish examples and other information from the text because the page is clearer and it is better for the reader´s orientation.

The publication is supplemented with exercises, well arranged tables, charts and the legislation relating to the activities of the school special education teacher. Very beneficial for the publication are the examples that complement the text and show

readers the experience of special educational experience. I appreciate also the references to additional literature for potential applicants.

In the first chapter is exposed the development of the field of special education. The authors interpret theoretical concept, describe the development of positive attitudes towards people with disabilities. The authors let the reader insight into the history of the field and they describe the development of special education centers in the time.

The second chapter defines supportive consulting services in schools, especially the specifics of professional activities and functioning of the school's consulting. The authors describe the current advisory system, consisting of three lines of consulting centres.

The third chapter contains models of involvement of special educators in schools. In the next section of this chapter are defined areas of work of this specialist.

The issue of professional development of school special education teacher is elaborated in the fourth chapter. Its subsections are devoted to undergraduate education, professional development and supervision. The chapter also deals with personality of school special educator and authors present the advantages and disadvantages of this profession.

The fifth chapter is important for orientation in the network of relationships at the school. The authors describe the relationship of a school special education teacher to the director, school management, teaching staff, teachers, and pupils and also to their parents.

Network of relationships outside of the school is dealt with in chapter six. This part deals with the cooperation with school guidance facilities, facilities for institutional and protective education, cooperation with government authorities, medical, school facilities and non-profit organizations.

Next chapter defines the professional activities of school special education teacher to the benefit of students according to Notice no. 72/2005 Coll. The activities are divided into the following main areas: searching activities, diagnostic, intervention, methodology and coordination. The authors describe the most common forms of the work of school special education teacher. The authors devote more in a detail to the content of work with students with different educational and behavioural difficulties and also methods of work in terms of pupils´ age with regards to problem areas.

The eighth chapter follows up the previous chapter and deals with professional activities in favour of teachers. The individual sub-sections describe the methodological assistance in the educating of pupils or pupils with minor learning difficulties, pupils with special educational needs, methodological assistance with solving educational problems, assistance to teachers in career guidance, assistance in dealing with multicultural issues, support for teaching assistants and teacher training in the field of special educational needs and vocational growth.

The authors deal with documentation activities in the ninth chapter. They suggest methods of registration what should be included in the documentation of the pupil.

The final chapter of the publication School special education teacher deals with lately discussed topics such as ethical contexts in the field of the professional school special education teacher. Due to the fact that the special education teachers in our country do not have established a code of ethics, the authors analyse the Code of Ethics of Special education centres and Code of Ethics of psychologists.

The publication gives to special education teacher impulses for not to focus only on issues of integration of students with physical disabilities but also to focus on the other problematic aspects.

Special education teachers can work in primary, secondary and special schools. The authors of the publication focus mainly on working experience in primary schools. In connection with the implementation of legislation and the realization of projects from the European Social Fund, we can expect that the exercise of the profession of school special education teacher will expand.

Publication certainly fulfils its role to convey the experience of professional working experience and in terms of the importance of the topic is beneficial for pedagogical theory and practice.

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