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Educational process in terms of teaching methods and organizational forms in small schools

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Abstract

The paper is based on the current research project aimed at finding the use of teaching methods and organizational forms in primary education. Small schools are an integral component of the education system with a specific approach to pupils. Specificity is determined by the fact that they are mixed-age classes, which require an individualised and differentiated approach from teachers to individual pupils. Within this approach, teachers use different strategies, organizational forms of work and teaching methods in the teaching. The aim of this paper is to analyse and describe the current situation based on the results of the quantitative survey. The fundamental research method was participant observation. The research sample consists of randomly selected teachers of small schools in the area of East Bohemia. The primary outcome introduced in this paper is to describe the current situation in the Czech Republic on the basis of which further research investigations will be implemented.

Keywords: primary education; teaching methods; organizational forms; small schools

1. Introduction

Teaching method is understood as a structured system of teaching activities for teachers and learning activities for students in order to achieve educational goals. They aren’t a decisive factor of teaching, but they are just one element of education learning system, they are tied to the overall concept of teaching, and are only fully functional and effective within that framework.

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A small school is a primary school in which at least students of different grades are together in one classroom. If in junior school classes there are less than 15 students per class on average, it is necessary to combine the classes. Small schools exist in municipalities in which the small number of students do not allow separate classes for each of the five grades in junior school to be established.

2. Theoretical background

2.1. Small schools

Small schools include schools with one, two, three and four combined classes. Currently, the most common type of small school is a school with a combination of two- and three-classes. Combined classes are seen abroad as an important alternative schooling. The term of combined class is essentially a synonymous to the used terms of multigrade class (class with multiple grades), multi-age class, mixed-age class. Classic classes are usually termed as single-grade class or conventional class (Mason & Stimson, 1996; Veenamn, 1995). "The combined and classic classes (separated according to grades) don’t show any significant differences in learning outcomes achieved by pupils. Although there are some negatives in the case of combined classes" (Průcha, 2001).

Veenman (1997), who has dedicated to the research of combined classes for several years, points out that in quality assessment of combined classes it is not only necessary to follow the data on learning outcomes of students, but also to examine real teaching in specific classes. Teaching in mixed classes is characterised by some positive characteristics:

- pupils spend more time with individual work than pupils in standard classes
- their learning style is more flexible, they are often encouraged to work more independently than in standard classes
- there is no evidence that pupils concentrate less on learning than in standard classes

In recent years a number of significant studies have been published which systematize and evaluate the research on the effects of multigrade classes on student achievement, as well as ones which investigate the processes that contribute to these effects. Veenman's (1996) best-evidence synthesis of research concerning the cognitive and non-cognitive effects of multigrade and multi-age classes was a very thorough and well-documented meta-analysis and a description of a large number of studies (45 of which were concerned with multigrade classes), drawn from a wide range of countries and nations across the world, both developed and developing (Russel, Rowe & Hill, 1998).

2.2. Teaching methods and organisational forms

According to Maňák and Švec (2003), a teaching method represents "a dynamic element" in teaching, which compared with the content and organizational forms changes relatively rapidly and adapts to new circumstances and objectives. The teaching methods, however, are not the decisive determinant of teaching, but only one of the elements of the educational system, and therefore cannot replace the missing content and compensate the indistinct target. On the contrary, they are tied to the overall concept of teaching and only within it are they fully functional and effective. Also Mojžišek (1988) talks about teaching methods in the same way, according to who a teaching method is a teaching specifically didactic activity of the subject and object of teaching, developing the educational profile of a student, while acting educationally, in terms of training and educational objectives and in accordance with teaching and educational principles. It lies in the modification of content, directing the activity of subject and object, organization of the sources of knowledge, techniques and procedures, ensuring fixation or control of knowledge and skills, cognitive attitudes, interests and processes.

The concept of the organizational form of teaching is also seen as the organization of the teaching process, which means creating an environment and the method of organizational activity of teachers and students in the classroom (Kalhouš & Obst, 2009). In terms of the definition of this term we follow the procedural aspects (internal conditions, the relationships between the content, the predominant activity of a teacher and pupil associated with the use of methods) and formal aspects (external conditions, i.e. the number of students in the classroom, teaching time, material and the technical equipment of classrooms). All this must be adapted to the set of objectives.
Kalhous & Obst (2009) also points out two aspects that are important for the organization of teaching. The first one is an aspect, "with whom and how" we work. From this perspective it is individual or collective teaching, or individualized teaching, and the extent to which the teacher seeks to promote co-operation among pupils. The second aspect explores the place "where" learning takes place.

3. Methodology of research

The presented research work is based on a qualitative - quantitative study, whereby the main objective is to describe the current condition (Cohen, Manion & Morrison, 2005). The basic descriptive analysis of the results was used to assess the data.

3.1. The research aims

As part of the research survey we have set the primary research goal as following:

- To find out which teaching methods and organizational forms are most commonly used by teachers in young primary small schools.

In addition, we have also set secondary goals:

- To determine the frequency of the use of various teaching methods and organizational forms.
- To describe the reasons for the use of various teaching methods and organizational forms from the teachers perspective.
- To analyse the pros and negatives of the use of various teaching methods and organizational forms

3.2. The research method

The first part of the research survey consisted of questionnaire and semi-structured conversation through which we gained the necessary data for a pivotal part of the research which was observation.

For the purposes of the research survey, we used structured observation (Kumar, 2005). For recording results, we created our own record sheet, mentioning the identification data regarding the observed group, a list of the various organizational forms and teaching methods as well as time aspects of the occurrence of individual records.

3.3. The research group

The interviews were carried out with a set of 8 respondents from various small schools in the Hradec Králové region. The questionnaires were distributed to 98 respondents, 86 were filled, which is 87,7% return. Their main aim was to obtain sufficient material for the preparation of the observation sheet.

Observation, as the principal research method, was implemented on a set of 6 small schools. In total, 16 observations were carried out on the basis of which the research findings are presented. The small schools were randomly selected from the basic set of small schools in the Hradec Králové region.

4. Research results

With regard to the maximum extent of the paper, here only the selected results of the implemented research survey are presented. We consider the overview of the used teaching methods and organizational forms in educational practice that provides a comprehensive view of the results obtained, as the most substantial findings.
Table 1. Overview of the methods used in teaching.

<table>
<thead>
<tr>
<th>Method</th>
<th>Time (minutes)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>individual work</td>
<td>554</td>
<td>43.5</td>
</tr>
<tr>
<td>project method</td>
<td>231</td>
<td>18.2</td>
</tr>
<tr>
<td>didactic game</td>
<td>174</td>
<td>13.7</td>
</tr>
<tr>
<td>explanation</td>
<td>76</td>
<td>6.0</td>
</tr>
<tr>
<td>work with text</td>
<td>70</td>
<td>5.5</td>
</tr>
<tr>
<td>work with pictures</td>
<td>68</td>
<td>5.3</td>
</tr>
<tr>
<td>production method</td>
<td>38</td>
<td>3.0</td>
</tr>
<tr>
<td>experimentation</td>
<td>30</td>
<td>2.4</td>
</tr>
<tr>
<td>brainstorming</td>
<td>17</td>
<td>1.3</td>
</tr>
<tr>
<td>teaching supported by computer</td>
<td>14</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Table 1 shows that the high prevalence belongs to the method of students’ individual work. This is perceived as not too surprising. Small school usually is not homogeneous, so the teacher uses more of a student’s independent work in order to better fulfill the lessons. The second most common method is the project method, which also is not surprising. This method provides the ability to effectively combine age-heterogeneous class and engage all pupils in the activities prepared. The third most common method is then didactic game, which is very usual method in working with children of younger age.

On the contrary, it is surprising for us that computer-supported teaching only has minimum occurrence. The causes can be found in the difficulty of document preparation for age-disparate classes as well as in poorer facilities of the small schools, which are usually located in smaller communities, where financial support is usually lower with respect to the number of pupils than in large cities.

Table 2. Overview of the organizational forms used in teaching.

<table>
<thead>
<tr>
<th>Method</th>
<th>Time (minutes)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>collective</td>
<td>651</td>
<td>51.2</td>
</tr>
<tr>
<td>group</td>
<td>298</td>
<td>23.4</td>
</tr>
<tr>
<td>pair</td>
<td>264</td>
<td>20.8</td>
</tr>
<tr>
<td>differentiated</td>
<td>59</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Table 2 shows that teachers mostly use the collective way of teaching. This can be considered as an expected result, because in terms of the organization of education process in small schools, this approach is easier for teachers. The second most common organizational form is group teaching. As the current trend in Czech schools is to prefer group forms of work, we do not find this result surprising.

We expected that the individualized form of work, due to the heterogeneity of classes, will significantly compete with other forms. We can find several reasons why this is not true. First, the fact that teachers at the small schools automatically prepare various materials without realizing that it is an element of individualization. The second factor is the way of preparation of materials and activities, so that pupils from second and third class can work together, regardless of the differences in age and current curriculum. In this case, it is possible to identify either mass or group work, but with the implemented elements of individualization.
In relation to teaching methods and organizational forms we were also interested in how teachers perceive the opportunity to improve their professional skills in this area, whether in their view, they have a sufficient amount of information.

Table 3. The possibility of drawing details on new teaching methods and organizational forms

<table>
<thead>
<tr>
<th>Method</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>57</td>
<td>66,3</td>
</tr>
<tr>
<td>Rather yes</td>
<td>25</td>
<td>29,1</td>
</tr>
<tr>
<td>Neither yes or no</td>
<td>2</td>
<td>2,3</td>
</tr>
<tr>
<td>Rather not</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>2,3</td>
</tr>
</tbody>
</table>

In our opinion the results are very positive. It turns out that 94% of respondents consider the availability of information for further education in the field as sufficient or rather sufficient. In contrast, only 3% of respondents feel there is a lack of information. The result indicates that the information base is rich enough, and that it depends largely on the interest and activity of teachers (and of course on the conditions from the founder and Heads of schools), whether they want to be professionally educated further.

4. Conclusions

From the perspective of teaching methods use in the classroom, we can conclude that in the observed small schools, comprehensive teaching method, namely individual work prevails. In terms of the readiness of students for the future we evaluate this result as positive. Furthermore, our findings show that the lessons are very often based on interview methods, which fully corresponds to the trends of increasing communication skills of young learners.

If we focus on the organizational forms of teaching, teachers mostly organize educational units on mass, where pupils work by their desks. In the case of direct teaching together with the teacher, as well as in individual work. This corresponds with the highest use of a student’s independent work, even if we admit that it can also be performed in the centres of activities. The results showed that students often work in groups. In terms of promoting collaboration among students we perceive this fact positively. Pupils at the time work either on the carpet or in groups around the desks, i.e. in the centres of activities.

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References

