The Proportion of School and Society on the Education of Gifted Pupils in the Czech Republic

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The readiness of Czech schools to work with talented pupils in the process of education is still not reflected by teachers in legislative support. This article is the reaction to this reality and offers a current view on the issues of registration of talented pupils and teachers’ readiness to work with these children in school. The article indicates some of the outcomes of the research project “The special needs of pupils in the context of the framework of the training programme for basic education” ID-0021622443. It focuses on the education of children, pupils and students with special educational needs, and extremely talented pupils and students, and points to the possibilities of training corresponding to the necessary quality for appropriate development of the individual talents of each individual.

Key words: talented pupil; science of education for gifted children; child development; research; pedagogical-psychological advisory service; knowledge; Czech schools; diagnostic

Introduction

Each of us has heard information from various lectures, programmes, articles or books which tried to deal with the problems of recoverability and unrecoverability of various resources which are necessary for humanity, for its sustainable development. We believe that children are the most worthy resource and neglecting their care can cause us to “not register” their potential. Extremely talented and talented children can be slightly forgotten because parents and even schools tend to prefer to deal with discipline and other problems in the education of children. And so even today it is not an exception that a teacher does not react to the fact of having a talented pupil.

This study is dedicated to our present situation, trying to solve the problems of gifted pupils and the educational approach to them. The research indicates the number of talented children that are found and
how many teachers have studied this topic. The research was done across the board in the Czech Republic. Even an extremely talented pupil is not able to develop his/her talent fully in the case that he/she does not have a teacher with a good approach. Teachers should attend courses or programmes of extended teacher education offered by faculties of education, which are dedicated to this topic. Teachers should be not only interested in learning disorders and average pupils but also in talented pupils. Talent nowadays represents enrichment and means a gift not only for gifted children but also for us teachers and for all society.

We can follow an example from the ancient cultures. These cultures mostly omitted the role of women’s education, but young boys were gathered by the rulers in their palaces and these were under the supervision of the most intelligent individuals in their empires. For example we can find some records about this fact in the book of Daniel in the Bible where the situation in the court of Babylon’s emperor is described. The most talented individuals were chosen from the conquered nations and from these talented ones the best became the governor.

Over time people come across physical, psychological and social differences between individuals and groups of people. We see the quantitative and qualitative differences in the process of the same work being done by different people. The fact that some people are able to do certain work faster and in a better way has been mentioned by people over many centuries and those abilities that are necessary to reach extraordinary results used to be considered “God’s gift”. At the same time people tried to explain this fact in different ways corresponding to the level of their knowledge and at the same time the level of society development in which they lived.\(^1\) We can find the first educational opinions and thoughts developing abilities and the individual in the writings of the ancient philosophers. Their own philosophical ideas can be classified into various streams of ideas. The schools that were founded here emphasized the development of individuals and support of learning (in ancient times the school of Isocrat was focused on rhetoric, Aristoteles Lyceum focused on sciences and Platon’s Academy supported mathematics, metaphysics and politics). Aristoteles preferred balance and rejected extreme subjectivity and also insufficient application of pupils’ abilities. Aristoteles emphasized the individual approach to the pupils and so became an important philosopher for

The founder and pioneer of the topic of talented pupils, American Lewis Madison Termen

The American scientist L. M. Termen is considered by many experts to be the founder and pioneer of the movement “for the support of talented pupils”. L. M. Termen (Stanford University) worked with several children on the west coast based on the Binet intelligence tests and based on the results he formulated development norms. In the year 1916 he and his colleagues did a Stanford revision of the Binet – Simon intelligence scale. This is used with some minor adjustments even today. At that time L. M. Termen took over the index of intelligence too, which happened in 1914. German psychologist William Stern is considered to be the creator of this index. The already mentioned quotient expresses intelligence as a proportion between mental age and chronological age. According to John F. Feldhusen, L. M. Termen provided the most important contribution on the topic of talented pupils. L. M. Termen examined 1528 extremely talented pupils (IQ 135–200) in 1921). The research findings were published in a five volume publication. He monitored the development of these individuals till they reached middle age. From the sample of examined individuals there were many successful people who published many books.³

The modern powers are aware of the value of talented and educated people, and thus “buying brains” happens, but in this case we talk about already educated people, adults. We must learn the ability to register the gift or talent at an early age. The ideal age for testing talent is between the ages of 5 and 8 according to Linda Silverman – manager of the “Gifted Development Center”. Linda Silverman has published a set of pieces of knowledge dedicated to talented children.

Readiness of teachers

Our aim was also to find out the readiness of teachers to deal with the issue of talented pupils. We were interested in how many teachers work in school and how many of them have studied this theme (professionally,
in courses, occasionally, etc.). We are going to compare the readiness of the teachers followed with colleagues abroad. For this we are going to use the research results with statistical data giving us the information about the number of talented pupils in the U. K. and in the U.S.A. with the aim of finding out whether the percentage of talented pupils is the same or comparable in Czech schools and schools in the mentioned countries.

The approach to the topic of talented pupils in the world

During the study it became evident that it is not an exception that in some Czech schools there is no talented pupil diagnosed, whereas abroad the situation is different. Very often up to 10% of gifted pupils from the whole population are registered in schools.4

As an example of this approach we can mention the United Kingdom (hereinafter the U.K.) with one specialised teacher in every state school who is responsible for identifying talented pupils and supervising them. This teacher keeps the evidence of gifted and talented pupils. The list of this pupils is not constant but the number of these pupils corresponds with their development. The development of children is not stable and the need for a special approach can after disappear a certain time. The development of many children is faster at the beginning of school attendance and later their development become comparable to others.

In the U. K. there were 679 870 gifted and talented pupils in evidence which corresponds to 10.3 % of the total number of pupils.5

British organisations supporting gifted and talented pupils include:
Young Gifted and Talented Programme
National Association for Gifted Children
Music and Dance Scheme.

From other countries outside of Europe we can mention the U.S.A., where similarly to the U.K. almost in every school there is one teacher educated in the area of talented pupils who supervises them.

The number of gifted and talented pupils identified in individual countries varies between 5 and 20% of the whole population and this percentage is remarkably higher than in the Czech Republic.

It is noticeable that the U.S.A. represents one of the countries with the lowest number of excellent pupils in mathematics at the age of fifteen. Countries such as Switzerland, Belgium, Finland and even the Czech Republic have at least five times more talented pupils in mathematics than the U.S.A.\(^6\) This can provide evidence about our views in the process of identification of talented pupils – from the view of IQ measurement and reviewing the field of logic and mathematics. The total low number of talented pupils in our republic together with the relatively high number of talented pupils in mathematics gives evidence about the fact that the other areas of gift and talent are omitted.

**Research methods and tools, organisation of the research**

The research can be aimed quantitatively or qualitatively. “Quantitative research deals with numbers. It tries to find out the amount, extent or frequency of appearance of a phenomenon. Numeric data can be mathematically processed. Contrary to this, qualitative research states its findings in words. It is a description, both vivid and detailed.”\(^7\)

According to P. Gavora the most frequently used methods of quantitative research are:\(^8\)

- observation
- scale
- questionnaire
- interview
- content analysis of text
- experiment

In this research the quantitative method of research was decided on and as a research tool a questionnaire was set for finding out the number of talented pupils in elementary schools and the number of special teachers trained on the topic of talented pupils. Research questionnaires were returned from 50 schools. These were filled in by qualified staff in schools, head teachers, deputy principals, and school advisers. The questionnaires were filled in during October 2010.

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\(^8\) Ibid, p. 24.
Overview of monitoring criteria

We chose for the purposes of an overview the principal criteria relating to talented pupils and the professional readiness of teachers. As a principal criterion for the specification of talented pupils expertise from the pedagogical – psychological advisory service was chosen (further referred to as PPAS), which is regulated by the Education Act No. 561/2004. Here we see the important role of the teacher, who should have special skills (at least awareness) which would help to manage the situation. This is the second crucial research aim of this study: the readiness of teachers for finding and working out an approach to talented pupils in schools.

Attained knowledge I.

Schools do not fulfil the expected 3% of talented pupils in Czech elementary schools.

We set this hypothesis.

Hypothesis 1:

There are talented pupils that are registered in the selected Czech schools, but the number of these pupils is lower than in the U. K. and the U.S.A.

Chart no. 1.
17 516 pupils attended the 50 monitored elementary schools generally spread over the whole of the Czech Republic. The experts occupying the topic of the education of talented pupils state that in a population sample there should be 3–5% of talented individuals. To strengthen the validity of the affirmation we will count on a minimal presumption of 3% in our empiric research.

From our finding a very severe handicap for Czech pupils follows. Based on a presumption limit of 3% of talented pupils there should be around 17 516 525 talented pupils. From our finding we know that there are only 73 pupils (40 boys and 33 girls – see chart n. 2), which statistically expressed represents 0.416%.

Chart no. 2.

| Overview of talented boys and girls from total number of identified talented pupils |
|----------------------------------|------------------|
| 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | 0 |
| 73 |   |   |   | 40 |   |   |   |   |
|    |   |   |   |   | 33 |   |   |   |

Talented pupils together | Boys | Girls

Chart no. 3.

| The comparison of the number of pupils in the Czech Republic to the world trend |
|----------------------------------|------------------|
| 10,30% | 8,20% | 0,42% |
| Talented pupils in the Czech Republic | Talented pupils in the U.K. | Talented pupils in the U.S.A. (state Ohio) |
Our hypothesis was confirmed. We found that we have less evidence of talented pupils than in the U. K. and the U.S.A.

**Attained knowledge II.**

**Hypothesis 2:**
In our schools there are not enough experts – teachers educated in the topic of talented pupils.

Chart no. 4.

![Chart 4]

Chart no. 5.

![Chart 5]
On average 15.00% of teachers took a course or studied the topic of talented pupils. On closer analysis of their studies we can state that the majority of teachers have studied professionally. Even if the low level of professional growth of teachers (70 teachers from 1327) is positive that teachers look for professional sphere and institution which garant the qualified and professional readiness. Among “others” respondents is meant the Faculty of Education, PPAS and Mensa which play a dominant role in this area. (detailed description in Table no. 1)

The teachers have studied the topic of talented pupils

Table no. 1.

<table>
<thead>
<tr>
<th>The category of studies</th>
</tr>
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<tbody>
<tr>
<td>Seminar with the topic of the education of gifted pupils</td>
</tr>
<tr>
<td>Self – study of special literature</td>
</tr>
<tr>
<td>Teachers’ guide of written material from PPAS</td>
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<tr>
<td>Special periodical for</td>
</tr>
<tr>
<td>Extended education programmes for educators offered by the Faculty of Education</td>
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<tr>
<td>Information from teaching conferences</td>
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<tr>
<td>Training organised by PPAS</td>
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<tr>
<td>Extended teacher education in pedagogical and psychology qualifications</td>
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<tr>
<td>Further education for teachers: Mensa – specific aspects of the work with extremely</td>
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<tr>
<td>gifted pupils in school</td>
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<tr>
<td>Mensa: Education of talented pupils</td>
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<tr>
<td>Centre of talents – Mr. and Mrs. Fořtik</td>
</tr>
<tr>
<td>Conference on gifted pupils (Zlín)</td>
</tr>
</tbody>
</table>
The category of studies

In Czech schools there was only a low percentage of teachers who were trained in this topic in courses but the content and quality of these was not closer specified.

The research results indicate that the training about this topic is not coordinated and is irregular whereas in the U.K. and in the U.S.A. there is one teacher in each school who is an expert in this topic. Based on this knowledge we think improving the training of Czech teachers in this topic would increase the number of identified talented pupils.

Conclusion

Identification of gifted pupils is directly proportional to the readiness of teachers in this area

Vladimír Čermák⁹, based on his own and other research, estimates that the ability to develop an intellectual gift can be expected during the first grade of elementary school at least in 10% of the population of children. Based on his/her abilities and results these children get access to higher levels of education. He supposes that these pupils should attain the highest levels of education. Yet the author supposes that the biggest number of unidentified talented pupils is in elementary schools. In the background of this failure there are many factors: insufficient identification and support of these schools – instead of these children being supported in their development, they are allowed to accept mediocrity as an acceptable value for them. This insufficient support is according to Čermák caused especially by the unreadiness of teachers in the area of talented pupils.

In this work we have examined whether there are talented pupils and teachers’ readiness to deal with the issue of gifted and talented pupils.

We have found out that in comparison to colleagues in the U. K. and the U.S.A. our teachers are less prepared and so we recommend how to improve this situation. Based on the facts that we got from the questionnaire about the number of teachers that were educated in this area and based on the results from the statistics from the U. K. and the U.S.A. we recommend that every Czech school should choose one

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teacher from the school who will be educated in this topic and will follow the development of this topic in the future.\textsuperscript{10}

Professionally trained teachers will work as instructors for their colleagues and so the costs of education of individual teachers will be reduced and the training of the school staff will increase. This training can become a part of regular meetings of all teachers or the training can proceed within the framework of teachers’ consultations. As a result some outcomes from the training would be reduced.

Further we suggest that these specially educated teachers can observe and aid the gifted children that were identified by the teacher or with the aid of family members, fellow students and other teachers provide care for them based on the teachers’ guidance even without contacting PPAS. In some cases the gift is difficult to prove or qualify. Nowadays many gifted pupils do not fit the criteria set out in PPAS. It happens sometimes that pupils fulfil the criteria for gifted pupils set out by PPAS but the school wishes to avoid the administrative complication connected with preparing individual plans of education. These pupils are not presented as gifted even though the school provides them with individual care.

One question still remains whether our school system is ready to work with gifted individuals. Firstly there must be quality preparation and training of teachers who are directly in contact with gifted pupils. Regarding the fact that diagnosing the gift is a long term question, this question should become a part of the general education of teachers. In elementary schools teachers do not consider this as an important or current issue. We must ask whether it is a symptom caused by insufficient interest from the side of the Ministry, teachers or parents. Only a coordinated effort can ensure success.

Overall we can state that the care for gifted pupils is still insufficient and not satisfactory in Czech schools. There are tendencies to change this reality but a long and distressful way is still ahead. The preparation of future teachers in the issue of the education of gifted pupils during their university studies would be a welcome start on this long journey. Our topic is as important a topic as the topic of special education, dyslexia or dysgraphia that we deal with these days. Also further postgraduate education of already working teachers should be part of the issue. The educational institutions present a wide choice of courses and these are available even to schools and to individual teachers. Very often the

initiative can come from the teachers. Information about gifted children, their education, problems that can appear, their needs and support are usually available. The Organisation of the Centre of Development of Gifted Children, and the Association for Gifted and Talented children spread information and knowledge, and organize courses and advisory services for parents, teachers and psychologists. Special literature is also more available these days. Many findings were carried out to clarify this topic, and to improve the information and quality of education of gifted pupils. The future and education of our children and the development of the gift of every gifted pupil is connected to the future of the whole globe. A very gifted pupil from one of our elementary schools could one day solve the problem of the ozone hole, come up with a replacement for the decreasing unrecorability energy or solve the ecological problems of our countries. Surely we could gather knowledge from abroad, where giftedness and the individualisation of education is a crucial theme. We must hope that our educational system will also make progress in the following years and that the gifts of our children will be developed by teachers specially trained in this area. We hope that these teachers will be supported by the state system and at the same time by their own school. We hope there will be teachers demonstrating unlimited interest in the education of gifted pupils, and that teachers will stimulate the development of the gift of every individual bearing in mind the importance of their work with the awareness of assets to society, the state and also the individual.

Epilogue

Additional open questions in the questionnaire

Two open questions were added to the questionnaire to obtain a better understanding of the problems connected to our theme. We received some interesting opinions on the open questions from the questionnaire. We have summarised the contents of these questions and we present them:

What are the main reasons for the fact that schools have low numbers of gifted pupils?

Ad.1 The respondents stated the following aspects as the main reasons:
➢ nobody is interested in this theme
➢ smaller town
financial conditions
- care of problematic pupils, pupils finishing primary school are leaving; they start to study at a selective secondary school
- administration connected with individual plans and visiting pedagogical-psychological advisory services
- necessity of sending the pupil to PPAS
- pupils are supported by the teacher in the frame of an individual approach

What can help according to you and how can we change these low numbers of pupils?

Ad 2. Respondents stated that the following facts could help:
- making tests aimed at identification of gifted pupils (for example examining the structure of the giftedness)
- detailed knowledge about the theme of education of extremely gifted pupils
- government regulation No. 72/2005 Collection of Law, 73/2005 Collection of Law
- financial resources for paying the courses (about this topic) for teachers, paying for cover lessons while their colleagues take part in the course
- to simplify administration connected with processing individual plans and visiting PPAS.