

**EÖTVÖS LORÁND UNIVERSITY**  
**FACULTY OF EDUCATION AND PSYCHOLOGY**  
PhD SCHOOL OF PSYCHOLOGY  
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SOCIAL INTEGRATION OF CHILDREN WITH  
MILD INTELLECTUAL DISABILITIES IN THE  
4<sup>TH</sup> 5<sup>TH</sup> AND 6<sup>TH</sup> GRADE PRIMARY SCHOOL

PHD THESIS SUMMARY

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SZEKERES ÁGOTA

SUPERVISOR:  
DR. N. KOLLÁR KATALIN

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# 1. Introduction

A higher number of similar social and cultural effects influence students with special educational needs than any other children. They are obliged to adapt to the accelerating world, to increased information flow and environmental conditions. This adaptation is difficult, since under the pressure of human civilization man – let it be an adult or a child – can keep his bodily and spiritual health only if he is aware of his own opportunities, his strength, his barriers, that is possessing real self-knowledge. The knowledge of other people and the ability to understand the rules of personal relationships is also important. These competences come into existence as a result of family rearing and institutional education. The situation is different if the reception and adaptation is made more difficult.

In many cases children with special educational needs (and often their families as well) are hampered by a number of circumstances in the experiencing and mastering of social abilities (for example: self-confidence, ability to make decisions, self-reliance). Even persons with an average ability suffer insecurity in new situations; children with disabilities with their insecure psychic, bodily and social functioning require special support and help.

Inclusive education of children with special educational needs is not yet quite widespread in Hungary, but the positive experiences of school integration and foreign examples confirm our belief in the necessity of its national application (Szabó, 2006).

There has been a legal opportunity for integrated education in Hungary since 1993. Serious debates surrounded the introduction of integrated education, in spite of the fact that the example of countries accomplishing integration well was always before our eyes. The educational law provided an opportunity for integration, but this did not mean that the institutions would have taken the road in big numbers into this direction. The drastically decreasing number of children helped in the process unambiguously, and an occasion arose to prevent the closure of certain schools by broadening the range of services offered through the inclusion of children with disabilities.

In Hungary – as opposed to the situation abroad – it is primarily students with physical disabilities, students with sensory impairment and the children with less severe special educational needs (for example: children with partial skills disorder) who participate in integration. The number of integrated children increases from a year to year although it lags behind the proportions experienced in foreign countries.

In my dissertation I would like to show the national situation of integration and success of children with mild intellectual disability, primarily from a social and emotional point of view. Increasingly more children have been learning in integrated circumstances in recent years - this is true for students with mild intel-

lectual disability too (Papp, 2008) - even if their proportion lags behind that is experienced in foreign countries significantly. In the 2006/2007 school year in Hungary 25% of the given group learned in integrated institutions (Csányi, 2008). It is necessary to prepare for the fact that more children will enter education in an integrated form in the future, it is important to know how they feel and how their integration may be successful.

In recent years the number of integrated children being educated greatly increased in almost all groups of persons with disabilities, which has made the examination of social and emotional integration beside that of cognitive performance (for example: Waldron, McLeskey, 1998) possible.

The antecedents of the questions of the research:

1. **First of all**, the different effects of integration on other groups of persons with disabilities have already been examined from a social and emotional viewpoint. Perlusz (1995, 2000) assessed hearing impaired children's social situation. Szekeres (1999) gathered data based on received integration applications by the Public Foundation for Disabled Children. There is research and there are analyses in case of the single disability types that deal with school- and societal integration (Alt, 2008; Perlusz, 2008; Somorjai, 2008) equally. Not only public education, but the integration in the area of higher education was examined (Takács, 2008).

2. **On the other hand**, more examinations were carried out on children with general learning difficulties (within those children in integration. Papp (2001, 2004) researched the supply of children with general learning difficulties from the aspects of the teachers, special teachers and the parents. Torda (2004) examined the integration opportunities of children with general learning difficulties from the aspects of personality. Another research revealed the national situation of people with intellectual disabilities, their living conditions, their special needs and their access to social, hygienic, special educational and rehabilitative provision (Bass, 2008).

3. **Thirdly**, in the international research on the integration of children with special educational needs the examination does not usually split the various disability types, thus making the findings difficult to interpret from the aspect of children with mild intellectual disabilities (for example: Klicpera, Klicpera, 2003; Cambra, Silvestre, 2003; Bunch, Valeo, 2004; Skarbrevik, 2005; Fredericksen et al, 2007; Frostad, Pijl, 2007; Koster, et al, 2007).

As a summary it can be said that several research deals with the different aspects of the question that supports our motivation in order to get an even more accurate picture of the social viewpoint of integrated children.

## 2. Hypothesis

We set up the next hypotheses.

1. a The social integration of integrated students with mild intellectual disability is realized at least to that extent as that of the non-disabled peers. A feature of children with mild intellectual disability is the slower development of cognitive functions, which may affect social adaptation (Mesterházi, 2001), but Frostad, Pijl (2007) found that there is no connection between the social position and the development of social abilities.

1.b Integrated students with mild intellectual disability like going to school at least as much as their non-disabled peers (Randoll; 1994; Elmiger, 1995; Cambra, Silvestre, 2003).

1. c The performance motivation of integrated students with mild intellectual disability is worse, than that of their non-disabled peers (Randoll, 1994; Elmiger, 1995); mainly due to the opportunity of comparison with the non-disabled peers.

2. Based on the earlier sociometry examinations (Bless, 1995; Sale, Carey, 1995; Klicpera, Klicpera, 2003; Cambra, Silvestre, 2003; Frederickson és mtsai, 2007; Frostad, Pijl, 2007; Koster, Pijl, Houten, Nakken, 2007; Estell és mtsai, 2008, 2009) we suppose that integrated students with mild intellectual disability receive less reciprocal choice in the questions on sympathy from their classmates, than their non-disabled peers.

3. Integrated students with mild intellectual disability get significantly more choice in questions on integration difficulties than their non-integrated classmates, as their integration difficulties are perceptible even for their peers.

4. We suppose that there will be sociometry questions at which we will find sex differences primarily and the determining question will not be the deficiency. We base this on the fact that there are questions about other talents in abilities independent from cognitive factors (drawing, sport, dance), in which the children may be talented irrespective of their intellectual disabilities.

5. We suppose that the special teachers' opinion on integration shows a significantly more positive attitude, than that of the general teachers', since for them the pedagogical work with children with mild intellectual disability is not difficult as it is for the general teachers.

6. We suppose that the judgment of performance and social integration of integrated students with mild intellectual disability will show a significant difference in favour of special education teachers, in other words the teachers' regard of the children is worse from these viewpoints (Forlin, 1995; Scruggs, Mastropieri, 1996; Padelidou, Lampropoulou, 1997; Loreman et al, 2007; Mahat, 2008; Baker-Ericzén et al, 2009).

7. We suppose that the metaphor research extends an additional content for the exploration of the attitudes in the research on integration and children learning in an integrated environment (Vámos, 2003; Péntzes, 2008).

The aim of this research in addition to all these is:

1. To receive detailed information on the teachers' learning organization procedures during the integrated education of children with mild intellectual disability (primarily from the differentiation, the applied work forms and methods) (M. Nádasi, 1986; Reiser et al, 1994; Wocken, 1994; Ainscow, Tweddle, 1995; Sebba, Byers, Rose, 1996; Kagan, 2001; M. Nádasi, 2003; N. Kollár, 2004a; Ofsted, 2004; Papp, 2006; Rief, Heimburge, 2006; Szekeres, 2006a; Szekeres, 2006b; Szekeres, 2006c).

2. To receive detailed information from special education teachers (re)habilitation procedures (primarily on the forms of assistance and the aims of special education intervention) (Wocken, 1996; Horváth, Hatos, 1997; Bradley, Roaf, 2000; Guiney, 2000; Metzger, Papp, 2000; Doyle, 2002; Eason, Whitbread, 2006; Nind, Wearmouth, 2006; Papp, 2007; Nagle, Thurlow, 2008; Norwich, 2008; Szekeres, Ari, 2008; McDuffie et al, 2009, Nilsen, 2010).

### 3. Sample

I collected the addresses of the schools with integrated circumstances for children with mild intellectual disability from a Hungarian database.

The distribution of the children by gender can be seen in the following table:

	<b>control group</b>	<b>test group</b>	<b>total</b>
<b>boys</b>	103	103	206
<b>girls</b>	97	97	194
<b>total</b>	200	200	400

1. table: *The distribution of the children participating in the survey by gender*

### 4. Instruments

#### 4.1 FDI 4-6: Questionnaire on the dimensions of integration

The authors composed the questionnaire for children with general learning difficulties. Csányi Yvonne translated it to Hungarian (Perlusz, 2000). The questionnaire examines three dimensions of integration: social, emotional and performance-motivated integration (Haeberlin, Moser, Bless, Klaghofer, 1989).

The results reveal the contact between the integrated child and the classmates in the *social dimension*. The provided information applies to whether the child feels socially well or not part of the class, can build up positive contacts in the class, or is a participant of the class's events. In the case of the original questionnaire the Cronbach alpha is 0.89 (Haeberlin, Moser, Bless, Klaghofer, 1989). The Cronbach alpha of the Hungarian scale is: 0,836.

The dimension of *emotional integration* gives information about the student's general condition. One of the most reliable signs of the success of educational integration is the self-evaluation of the student's emotional state in the school environment. In the case of the original questionnaire the Cronbach alpha is 0.93 (Haeberlin, Moser, Bless, Klaghofer, 1989). The Cronbach alpha of the Hungarian scale is: 0.932.

The dimension of the *performance motivated integration* means the child's own judgement of his/her abilities in the school education setting. The child may consider himself/herself well integrated if he/she can come up to the school requirements, and thus fulfils the tasks while being motivated. It is linked to the emotional dimension (Haeberlin, Moser, Bless, Klaghofer, 1989). In the case of the original questionnaire the Cronbach alpha is 0.93 (Haeberlin, Moser, Bless, Klaghofer, 1989). The Cronbach alpha of the Hungarian scale is: 0.922.

## 4.2 Sociometry

We made factor analysis in relation to the sociometry questions, because we wanted to know if the questions in the questionnaire group along these larger factors.

We identified 5 factors with the help of factor analysis:

*1<sup>st</sup> factor:* Abilities: these questions are connected to different abilities (for example: intellectual abilities, motor abilities, social abilities). The Cronbach alpha of the 1<sup>st</sup> factor is 0.958.

*2<sup>nd</sup> factor:* Integration difficulties: questions about the integration problems got into this factor. The Cronbach alpha of the 2<sup>nd</sup> factor is 0.888.

*3<sup>rd</sup> factor:* Sympathy choices: the questions of this factor help forming the sociogram. We examined children with mild intellectual disability and their classmates' reciprocal choices with the help of the questions. The Cronbach alpha of the 3<sup>rd</sup> factor is 0.908.

*4<sup>th</sup> factor:* Competition factor: the questions covering related elements with the competition are in this factor. Children could choose those who like winning compete with pleasure. The Cronbach alpha of the 4<sup>th</sup> factor is 0.814.

*5<sup>th</sup> factor:* Verbal aggression: two questions got into this factor. One is about mockery at school while the other one is about the verbal punishments of the teacher's. The Cronbach alpha of the 5<sup>th</sup> factor is 0.822.

### **4.3 Questionnaire for teachers**

The instrument consisted of 28 questions. We asked about basic data in the first part of the questionnaire (for example: sex, the size of a settlement, county, maintainer of the school). Among other things the clarification of the educational conditions was our aim, we wanted to know the types of integration, conditions and methods of differentiation, advantages and disadvantages of integration.

### **4.4 Questionnaire for special education teachers**

The instrument consisted of 18 questions. In the first part of the questionnaire we asked about basic data (for example: gender, qualification, educational experience). The rest of the questionnaire dealt with special methods of special education in relation to integration (aim of the development, the methods of the giving help, application of the co-teaching models).

### **4.5 Questionnaire about the child**

The questionnaire consisted of 12 questions. The special education teachers and the general teachers had to fill in the third questionnaire in as many copies as many integrated children they teach. They had to answer concrete questions in relation with the child, concerning their performance and social integration.

### **4.6 Metaphor research**

The metaphor means the understanding of a conceptual entity with the terms of another conceptual entity (Kövecses, 2005). Because of this, the metaphor-examination is frequent in scientific research where it is about a phenomenon that is difficult to, or cannot be conceptualized in another way (Vámos, 2003), for example when we are not sure whether the examination persons write the truth because of the expectations. There are diverse techniques for the collection of metaphors; the key is that the person being examined turns to one of the forms of the word when he/she answers. We chose sentence completion for our research where everybody could express his/her related thoughts and feelings about integration and the integrated child.



The special education teachers and the general teachers had to finish two sentences at the end of the questionnaires. These were:

Integration is like .....

.....

The integrated child is like .....

.....

## 5. Results

### 5.1 The examination of the hypothesis

We order the findings of the research along the hypotheses.

#### 1. a The social integration of integrated students with mild intellectual disability is realized at least to the extent as that of their non-disabled peers.

The information in social dimension applies to whether the child feels socially well or not to be a member of the class, can build up positive relations in the class, or participates in class events.

Generally the social integration of the integrated children with mild intellectual disability is worse than that of non-disabled children. This confirms with the results of Randall's (1994) examination. According to another author – similarly to our results - the students with special educational needs generally reported less favourable social experiences, many children felt alone (Klicpera, Klicpera, 2003).

Looking at gender differences: there is no difference in the boys' case in the quality of the classmate contacts in the examined population, the two groups consider themselves to be part of the class to the same extent. According to this, based on the self-reported data of the students the integration of the boys is more successful than that of the girls. The boys' situation is better in an integrated class considering partnership and friendly relations, than that of the girls'. The same cannot be said of the girls, the non-disabled girls have more friends in class, than the girls with mild intellectual disability.

The reason of the different integration of girls and boys may be that there is a big difference in their adaptation already at the time of entering school. The school and school performance have great significance in the girls' self-esteem, while in case of boys school performance is only one of the feedback sources besides sports and other extracurricular activities for the formation of self-knowledge (Kőrössi, 2004). Because of this, in case of boys with mild intellectual disability the situation could be similar. In case of integrated girls school performance can receive an emphasized role, just like in the case of others, only

they cannot meet the requirements (see the dimension of the performance motivated integration later), because of which their self-evaluation and their school integration becomes problematic.

Considering the grades: in the case of the social dimension, 4<sup>th</sup> grade children's social contacts are better, than the 5<sup>th</sup> grade children's. The difference may be due to the change of school advancement, in lower school there are less teachers while in upper school there are more teachers depending on the new subjects. The problem may be increased by the fact that at this age (young teenagers) because of the developmental psychological changes children are critical not only towards themselves, but towards their peers as well. They may value others' and their own behavior more objectively and they may sometimes overdo when for example punishing rule-breaking too harshly (Tóth, é.n.).

### **1. b The integrated students with mild intellectual disability like going to school as much as their non-disabled peers.**

One of the most reliable signs of the success of educational integration is the self-evaluation of the student's emotional state in the school environment. It is interesting that after the children's situation in a class – that is rather worse than the others' – the result had a more positive emotional state in this dimension generally after all. This is congruent with the results of Randoll's (1994) examination.

Looking at gender differences: boys with mild intellectual disability like going to school more than non-disabled boys. Their emotional state is more positive in these classes. In the background may be the fact that emotional integration is defined by the relationship not only to the classmates but to the adults (teacher, special education teacher) as well. Our analysis based on the sample does not confirm this; neither the time spent with the special education teacher, nor the time spent with the general teacher is related to the results within the emotional integration dimension of the children with mild intellectual disability. In our sample from an emotional point of view there is no difference between the boys' and the girls' integration on based on students' self-report.

Considering the grades: in the case of the emotional dimension 6<sup>th</sup> grade students with mild intellectual disability like attending the given institution less than the 4<sup>th</sup> grade integrated students. Other studies observed this general tendency as well, that with the progress of age the positive relation to the school decreases. Aszmann's (2003) data stated that while almost half of the 5<sup>th</sup> grade students enjoy school work and likes going to school, this proportion is merely only one third of the 11<sup>th</sup> grade students.

### **1. c The performance motivation of integrated students with mild intellectual disability is worse than that of their non-disabled peers; mainly because of opportunity of comparison with the non-disabled peers.**

The dimension of the performance motivated integration means judgement of the child's own abilities within the framework of school education. The child may consider himself/herself well integrated if he/she can meet the school requirements and fulfill the school tasks being well-motivated. It is linked to the emotional dimension (Haerberlin, Moser, Bless, Klaghofer, 1989). Generally students with mild intellectual disability cannot meet the requirements compared to the others. In the case of performance motivated dimension, the non-disabled boys considered their performance better than boys with mild intellectual disability. The performance of non-disabled girls is also better than that of girls with mild intellectual disability.

This result is not surprising, Haerberlin (1989) reached a similar result with the original, German questionnaire, and Randoll's (1994) studies reinforce that, too. Elmiger (1995) received similar results in case of students with hearing impairment. It is possible to change all this with the transformation of teacher training or with the graduated teachers' further professional trainings, primarily with learning the developing assessment and its efficient application in the schools.

In many schools the assessment of the children with mild intellectual disability happens based on the requirements of the primary school of children with mild intellectual disability. Still they have more opportunities after all for comparison in integrated circumstances, which may lead to more real self-image, but at the same time may make self-acceptance harder.

We did not find any gender differences in the sample.

Considering the type of the integration: during part-time integration the performance motivated integration of children with mild intellectual disability is more successful than in full-time integration. There are several reasons for this. On the one hand, children with mild intellectual disability may confront their weaker performance many times in the full-time integration, because the teacher gives a differentiated task only to them or the teacher does not differentiate sufficiently enough even for them.

Considering the grades: in the performance motivated dimension we did not receive a significant difference in the case of the grades, which is good on the one hand, but on the other hand surely not. We have already seen that the two examined groups differed significantly in this dimension. However, there is no significant change between the grades. The decrease that occurs during the 2 years in connection with non-disabled children does not happen; the reason of this is presumably the fact that the integrated students have already got a very

low value for this from the beginning. The more accurate happenings can only be understood better in the course of a longitudinal examination.

**2. Based on the earlier sociometry examinations we suppose that the integrated students with mild intellectual disability receive less mutual choice in the sympathy questions from their classmates than their non-disabled peers.**

Children with mild intellectual disability received significantly less choice generally, than the non-disabled students. Pijl, Frostad (2010) received similar results, who found that children with disabilities are less accepted than non-handicapped children in a class, which means significantly less sympathy choice in the sociometry. The results of several previous studies confirm this (Bless, 1995; Sale, Carey, 1995; Cambra, Silvestre, 2003; Torda, 2004; Frostad, Pijl, 2007; Koster, Pijl, Houten, Nakken, 2007; Estell et al, 2008, 2009).

Concerning the gender differences: we see that gender does not have a significant effect in the case of the sympathy choices. On the other hand the existence of the impairment and gender together do. That means that gender and the impairment together have an effect on the sympathy choices.

Considering the type of integration: children with mild intellectual disability received significantly more sympathy choice in full-time integration than those who study in part-time integration. This result contradicts Bless' (1995) examinations, where it was found, that the disabled students' lower sociometry status does not depend on the type of integration. Sale, Carey (1995) stated that the fact that the disabled children spend 100% of the day in integrated circumstances does not modify the opinion of the peers.

Considering grades: in our examination we did not find any differences in the case of the sympathy choices. This contradicts Skarbrevik' (2005) data, who found that the older children included their disabled peers less than the younger ones.

The unfavourable physical appearance or strange or especially aggressive behaviour spoils the social situation in all ages. Social cleverness, empathy, a conflict solving ability characterise the leading children in the group generally. Immature behaviour is typical of rejected children with unfavourable bizarre or unusual looks (N. Kollár, 2004b).

Beneficial characteristics in terms of group position: intelligence, good school performance, independence from adults, kindness, sociability and courage (N. Kollár, 2004b). The higher socio-economic status yields the improvement of the position (N. Kollár, 2004b). The teaching of social skills would be important for children with mild intellectual disability (Cuckle, Wilson, 2002); it would be possible to help the forming and maintenance of their contacts.

**3. Integrated students with mild intellectual disability are given significantly more choices for integration difficulties than their not integrated classmates as their integration difficulties are perceptible to the peers.**

In the questions concerning all of the integration difficulties the classmates generally elected the children with mild intellectual disability significantly more than the non-integrated students.

Looking at gender differences: girls with mild intellectual disability play more alone according to the others than boys with mild intellectual disability, and this does not change with the progress of age. The result that the girls are quieter than the boys in the lessons reinforce this. The classmates claim that girls with mild intellectual disability "have looked for friends in the class" more than the boys. The boys on the other hand - from the control group or from the experimental group - receive more help from the teacher compared to the girls.

**4. We suppose that there will be questions pertaining to sociometry which show us primarily gender differences and the definitive one will not be the fact of the deficiency. We base this on the fact that there are questions about other ability talents independent of cognitive factors (drawing, sport, dance etc.), in which children may be talented irrespective of their intellectual disability.**

There was only one question in the question row to which we did not find any significant difference in favour of one group or the other, and this was mockery (Who is mocking whom often?). Thus integrated children mock their classmates just as much as the rest of the class, not more and not less. Regarding the question concerning mockery, we only found gender differences: boys use this verbal aggressive element more, whether they are integrated or not. This result contradicts the fact that verbal aggression is typical of the girls (F. Lassú, 2004).

We did not find any differences analyzing the grades separately.

**5. We assume that the opinions of special teachers on integration show a significantly more positive attitude than those of general educators.**

As to the advantage of the integration – from the point of view of children with disability and of other students – several things were indicated by the (special) teachers. For example: group experience, development of cooperation, friendship, personality getting richer, learning to help and accepting help. It can be stated that in the case of both teacher groups they separated the effects on social abilities (group experience) from the effects on cognitive abilities (developmental environment). The (special) teacher who mentioned the effect of integration on social abilities did not consider the changes affecting the cognitive abilities important and vice versa.

It was shown, on the other hand, in an international study, that teachers emphasized the benefits in connection with social abilities mostly. The social model's role was important in connection with the disabled students, while in the case of non-disabled students understanding, care and tolerance was mentioned (Anderson et al, 2007).

It is important to emphasize from our results that the (special) teacher who did not select group experience, did not mention the long-distance positive effects of integration.

Regarding the disadvantages of integration the examined persons emphasized the difficulties of the acceptance of "otherness", the appearance of behaviour problems, the tasks with work organization, exclusion and loneliness. In an international examination teachers reported four categories of disadvantages: lack of time, time which cannot be devoted to children with disabilities, behavioural problems in the class and disadvantages related to learning (Anderson et al, 2007). These all appeared in our examination too both the special teachers and the general teachers mentioned these.

Based on our examination the opinion of special education teachers on the success of integration is generally better than that of general teachers. A lot of international research confirmed that the special teachers' attitude towards integration and inclusion is more positive than the opinion of other teachers (Forlin, 1995; Padeliadou, Lampropoulou, 1997).

The teachers' answers reflect that the grades have significance in connection with integration. The higher the grades in which a teacher meets integrated children, the less successful they consider integration to be. Research related to this shows that the higher grades a teacher teaches the less they have a positive attitude towards integration (Marchesi et al, 2005).

The judgements of special education teachers - similarly to those of the other educators' - decrease regarding the success, but only from 4<sup>th</sup> grade onto 5<sup>th</sup> grade. We did not find any relation like this concerning the rest of the grades. The decrease which can be experienced in the case of the 5<sup>th</sup> grade may be the consequence of the children spending their first year in the upper school. Many new things have to be learned and get acclimatized to, that they had not have before. This may explain the phenomenon that we experienced at both teacher groups.

We found a considerable difference considering the success of the given child's integration between the teachers and the special education teachers, similarly to the general judgement. The special education teachers consider the single children's integration much more successful than the teachers teaching the class.

Looking at gender differences: the results indicate in the boys' case that the teachers' and the special teachers' opinions do not differ, while there is a significant difference in case of the girls. Teachers regard the success of integration bet-

ter in the girls' case, but among special education teachers this proportion is even bigger. According to this, special education teachers see the integration of girls much more successful than the teachers teaching the class. These results contradict the results of the children's self-reports; the social integration of boys with mild intellectual disability is more successful than that of the integrated girls.

The results of previous studies indicate that teachers would teach students with physical disabilities, sensory impairment or mild disabilities rather than children with complex needs or children with intellectual disability (Avramidis, Norwich, 2002; Marchesi et al, 2005; Subban, Sharma, 2006).

**6. We assume that the judgment of the performance and the social integration of integrated students with mild intellectual disability will show a significant difference in favour of the special education teachers - in other words: the general educators regard children worse from this point of view.**

According to the teachers the children's strongest field is physical education, singing, art and arts and crafts. These are all so called skill subjects. Reading technique, natural sciences and vocabulary follow these, and then come mathematics and independent oral composition. Reading comprehension, spelling and independent written composition are the most difficult areas according to the teachers teaching in the class.

In the special teachers' judgement the children's performance is better in the skill subjects: physical education, drawing, arts and crafts and singing. Reading technique, mathematics and the natural sciences follow this, and then come vocabulary and reading comprehension. Reading comprehension and mathematics are way ahead in the line than with general teachers. Independent oral composition was considered the most difficult together with spelling and independent written composition.

We discovered a significant difference in most areas in the case of the two teacher groups concerning the judgement of the children's performance. An exception being physical education, drawing, arts and crafts and singing, in other words, the skill subjects. Special teachers consider the performance of integrated children in all cases better than other teachers teaching in the class. In the analysis of these results it is important to mention that there was no agreement between the two groups of teachers whether to use a different curriculum for children with mild intellectual disability or not. Teachers should be aware of the fact what kind of performance can be expected from children in certain grades. A comparison to the rest of the class's members do not give an accurate image of the knowledge of the child with mild intellectual disability.

There are two areas where the performance of the specific grades differ from each other significantly according to the judgement of the two teacher groups. According to the teachers and the special education teachers, in the case of writ-

ten composition, it is unambiguously visible, that the 5<sup>th</sup> grade is better than the 4<sup>th</sup> grade and the 6<sup>th</sup> grade's performance is better, than that of the 5<sup>th</sup> grade.

The two teacher groups think that children either cannot judge their performance or that they can see it realistically. According to 12 special education teachers, integrated children accurately judge their performance, according to 12 teachers, the integrated child does not judge his/her performance well. The opinion of 8-8 (special) teachers is that they regard their performance better than it really is.

Teachers and special education teachers believe that integrated children have a neutral relationship with the classmates or that they are rejected in some situations.

Considering the change of the relation with the classmates, the two teacher groups think that the children's situation did not change as compared to the beginnings. They are inclined to see that it improved a little bit.

## **7. We assume that metaphor-research provides an additional content in the exploration of the attitudes within the research on integration and integrated children.**

Primarily we had an opportunity for qualitative analysis of the cognition of metaphors. Firstly, we grouped the metaphors written by teachers and special education teachers into conceptual categories, and then we created meaning groups. Finally we were looking for the origin area of the metaphors, we tried to recognise a phenomenon and through this we tried to get to know a phenomenon that cannot be approached otherwise (Vámos, 2003): these are the thoughts and feelings of the ones being questioned concerning integration and the integrated child.

Most answers to the question "Integration is like..." call attention to the fact that something is upsetting the daily educational practice to which they have become used to by now. There is a community in which we, who are different, can live, and this calm atmosphere is disturbed by the process of integration. Péntes (2008) states in her study, that if society rejects adults and children with disabilities, then these aversions may filter into the institutions. Bad atmosphere makes cooperation amongst community members difficult. This view is reflected in our research results.

Three things are mentioned in the sentence "The integrated child is like..." that come to one's mind be it a child or an adult. One such thought is helplessness, since many impaired conditions entail this or that the person has to ask for help performing certain activities. The other thought is value, which expresses that we talk about valuable people who may be talented or outstanding. And thirdly the thought of "otherness", the fact that we are diverse.



Additional questions:

**1. To receive data on the organisation of teaching processes of teachers during the education of children with mild intellectual disability (primarily on differentiation, the applied work forms and methods).**

Regarding the difficulties of differentiation, almost half of the teachers indicated organizational difficulties and children's slight cognitive abilities. 21% of the teachers missed the existence of the special appliances, 25% considered their own tasks too difficult to differentiate. According to 14% the lack of social abilities make the work difficult. It is an interesting result that the teacher who mentioned the organizational difficulties did not consider the importance of quality of the cognitive abilities.

The teachers mentioned the existence of appliances as the most important condition of differentiation, according to 52% the tasks on the suitable levels, technical appliances and an appropriate room is a precondition. 38% considered the elements concerning organisation important, e.g. time, lower number of children in a group, or the composition of the group. Although that teachers mentioned the children's slight cognitive abilities as a problem, here only 23% of them indicated independent problem-solving or appropriate level of task-awareness as a precondition of differentiation. We have to take several factors (for example cognitive abilities, cooperation abilities) into consideration when making the decision whether to provide common learning or differentiated learning conditions to our students (M. Nádasi, 1986).

Considering the methods of differentiation, most teachers differentiate in tasks, and then in the change of social forms, and giving help – the latter was chosen by 69% of the teachers with a yes. Very few people elected learning style (21 persons), product (18 persons) and interest (17 persons) in differentiation. Less than 15% of the teachers take into account what interests the children, though they state the children's motivational problems at some places in the questionnaire. The teacher who differentiates in tasks also differentiates often in social forms. The teacher who differentiates in the tasks does not differentiate in the interest.

As the aim of the differentiation the educators consider the development of the children's own opportunities as most important. It is followed by the securing of the feeling of achievement. Then the development of the right abilities – under which we may understand talent care – and the development of cooperation follow.

Teaching independent learning is considered important for the students, as is the forming of the correct learning habits. The selection of suitable learning methods regarding the specific learning style may be an important factor for the

forming of good habits with respect to independent learning (Lappints, 2002; Strichart, Mangrum, 2002).

Then comes catching up as an objective. If the nominations mean the catching up of the non-disabled children, then this is a realistic aim. If we refer to the integrated children with mild intellectual disability, this summing up will never happen. In their case another aim should be set. The forming of the real self-evaluation is in the last place together with the training of self-control.

Wocken (1994), Reiser et al (1994) emphasize the didactical level of integration. Internal differentiation may belong here without which successful and efficient integration is unimaginable. The differentiation of appliances may also belong here, during which we choose the most appropriate appliance, school equipment and device for the development of each child.

When considering work forms, we found that the 100% of the teachers questioned apply frontal work, followed by group work, then pair work. Individual or individualized work was elected by many people. If the teachers use pair work they use group work too. Horváth (without a year) reinforces this, according to this view, group work may grow out of pair work. It is interesting that we did not find any contacts like this between the individual work and the differentiated individual layer work. It is questionable whether the answering teachers knew about this latter work and what it really is.

It is important to emphasize that teachers have other tasks in the course of a group work, for example: direct indirectly, cannot dominate everything, this kind of work may entail noise and displacement (Ainscow, Tweddle, 1995; N. Kollár, 2004a; M. Nádasi, 1986; M. Nádasi, 2003; Sebba, Byers, Rose, 1996).

Considering group shaping: only 12 teachers indicated that they used homogeneous groups relevantly, which is very promising, since we know that real cooperative work may come into existence in a group with heterogeneous combinations (Horváth, without a year, Kagan, 2001). The teachers selected the viewpoint that the children who can work together well should get into one group (51 people) and that groups should be formed in a planned but randomized way (45 people) in almost equal numbers. Randomisation may be dangerous if children who cannot work together get into a group for one reason or another (for example everybody has weaker social abilities etc.). The choice that students should choose their own group-mates was less marked, although several authors (Horváth, without a year; Kagan, 2001) considers it important that children should have an occasion to experience that he/she might not be able to work with his/her best friend and think through his choice based on the experiences.

Several international and Hungarian books and publications help the teachers' daily work regarding differentiation (Bellanca, 2009; Evans, 2007; Heacox, 2006; Ginnis, 2007; Fazekasné, 2007; Karten, 2009; Nicholson-Nelson, 2007;

M. Nádasi, 2006; Molnár, 2006; Ofsted, 2004; Papp, 2006; Rief, Heimburge, 2006; Szekeres, 2006a; Szekeres, 2006b; Szekeres, 2006c).

## **2. To receive detailed information on special education teachers' (re)habilitation procedures (primarily from the forms of the assistance and the aims of the special education development).**

The vast majority of special education teachers apply an individual or small group form apart from the class. Only 25% of them (17 persons) indicated that they provide individual help inside a classroom, 12% of them (8 persons) in small group forms. Two teachers apply the co-teaching model.

We received the result that the special education teacher who develops in a group form outside the classroom does not give rehabilitation classes within the classroom neither in an individual, nor in a group form.

Considering the aim of special education development, we found that general ability development is in the first place, then come communication and development of cognitive abilities. Onto the last places the colleagues count the development of social adaptation and motion. The closing of the gap and tutoring took the last places. Special education development has to always take the aim of developing abilities thus (re)habilitative procedures may not turn into simple coaching or closing the gap. Children with mild intellectual disability will not catch up, since the main symptom of the problem is slower development of the cognitive functions (Mesterházi, 2001).

Several international studies (Wocken, 1996; Horváth, Hatos, 1997; Bradley, Roaf, 2000; Doyle, 2002; Nind, Wearmouth, 2006; McDuffie et al, 2009) and Hungarian publications (Metzger, Papp, 2000; Papp, 2007) confirm the necessity for the application of the co-teaching model.

We may establish that this technique is not very much applied in Hungary. In the examined integrated institutions, it is primarily the individual and small group (re)habilitation procedures that are aimed at, that are essential for the optimal development of those with intellectual disability (Guiney, 2000; Eason, Whitbread, 2006; Nagle, Thurlow, 2008; Norwich, 2008; Nilsen, 2010; Szekeres, Ari, 2008), they do not provide enough help to those teachers who are teaching in the class on the other hand.

## **5.2 Discussion**

### **Proposals for teachers**

We may establish that the teachers do not know what to do with the diminished, modified requirements they do not know how to measure the performance of

integrated children that they may be real for them. Being compared to other children will lead to the awareness of how much less they know than the rest.

**1st proposal:** The learning of the differentiated, developing assessment would be highly important regarding the achievement of successful integration.

Teachers regard integration as more successful in the case of the girls, than in that of the boys. On the basis of the children's self-reports, we received the result that the social integration of boys with mild intellectual disability is realised, while that of the girls with mild intellectual disability is not. That means teachers consider the quieter, more withdrawn behaviour of the girls as social integration.

**2nd proposal:** The successful integration which cannot be imagined without the children's real cognition, the teachers' own gender stereotypes have to be known and it is necessary for them to handle this in the daily practice. Besides this, it would be important to devote time to talk in connection with integration during the lessons problems (for example: on a form master lesson) or after them.

According to our results the teachers apply the differentiation from a diverse aim; they stated real difficulties and used various forms in the integrating classes. What all teachers use is still the frontal work. From the viewpoints of group-shaping, the development of the social skills is taken into consideration primarily; the random methods are also applied with pleasure.

**3rd proposal:** It would be worth applying differentiation methods, which few have tried so far (for example: differentiation based on the product or interest). It would be favourable to recognise the opportunities in the differentiated individual layer work, in the course of which differentiation between the layers of the class can be realised. It would be important because not only children with mild intellectual disability may do something else than the others, but other children may receive tasks at another level as well, who may have learning difficulties but have no expert opinion. Beside this, it would be favourable to use the viewpoint of the sympathy more frequently in the course of group making.

### **Proposals for special education teachers**

The special education teachers regard integration as more successful in the girls' case similarly to the teachers, but to an even larger extent than the teachers.

**1st proposal:** Successful integration which cannot be imagined without the children's real cognition, the teachers' own gender stereotypes have to be known and it is necessary to know this in the level of daily practice. It would be important to the teachers and the special education teachers to collaborate for the promotion of social integration (for example: the planning of games and tasks, which may further this among the children).

It became unambiguously clear in the course of the examination that the two teachers model is not used practically in integrated institutions. Its application

has a number of conditions, but we may separate four types within the two teachers models (these are: professional assistance; differentiation with support; team-teaching; cooperative teaching, cooperative learning), to all it is necessary to create something different, so the conditions are modifiable.

**2nd proposal:** The introduction of the application of the two teachers models and their more frequent usage in the integrated classes. Other studies confirmed that the children with disabilities are more confident, they study more and their behaviour is better in the two teachers classes (Hang, Rabren, 2008). More authors found it, that according to the teachers in the two teachers class, the students are more confident, their subject knowledge is better, their social skills are better and their contemporary contacts are better, too (Hang, Rabren, 2008).

Special education teacher answers reflect that the health- and education-oriented habilitation and rehabilitation activities are realized in the examined institutions, primarily as out-of-the-classroom activities. Focusing on the type of the integration we found that, among partially integration circumstances the performance-motivated integration of children with mild intellectual disability who study integrated is more successful than of those participating in the full integration.

**3rd proposal:** An essential requirement of a successful integration is the realization of rehabilitative activities. Along with these the level of performance motivation integration should be secured within the full integration, as well. This should be achieved through methodology counselling, consultation opportunities, primarily about the curricular requirements that can be expected from children with mild intellectual disability, and about the possibilities of evaluation.

### **Proposals to the development of the additional research topics, methods**

We can state that **FDI 4-6 scale** is used not only at home but internationally as well. Some researchers use it without alterations, others adapt it or view this questionnaire compiled by the Swiss working group as a starting point (Bonvin et al, 2008; Thoma, 2008; Rašl et al, 2009; Vetter et al, 2010).

It is important to note that several aspects were not put into the focus of the examination in our research. Therefore we cannot know which **background variables** (family factors, intelligence) can help the successful integration of children with mild intellectual disability. For the time being this was not defined by any other Hungarian research group, either (Józsa, Szabó Ákosné, 2010; Józsa, Fazekasné Fenyvesi, 2010).

It would be useful to carry out researches focusing on the **attitudes** of integration participants (teacher, special teacher, not-handicapped children, parents, other helping specialists), either using attitude scales or with other methods of metaphor research.

### 5.3 Limitations

While planning the research our aim was not the exploration of the children's **social situation**. Seeing the results, it would have been worthwhile to compose the questionnaire to contain questions focusing on this. We were trying to get a perspective from the whole of the country, and we more or less succeeded.

We did not ask the **parents** in this examination. The questionnaire package was large enough without including their opinion. We considered it unfeasible to give the teachers and special teachers the extra task of questioning the parents as well.

We found out nothing about the children's **contacts outside of the school**, nevertheless, we did not intend to, either. Still, it is important to mention that children who do not have a mutual contact in class can have several from different sources, from the street where they live, from the sports field which they go to, from the family etc.

The limitations of our cross-section research are obvious. We examined 400 children at one particular moment in time, who were either in the 4<sup>th</sup>, 5<sup>th</sup> or 6<sup>th</sup> grades. We could only make limited statements as to how their acceptance varies from class to class. We can only draw definite conclusions if we do follow-up research in these classes and we examine the children's assimilation longitudinally. This longitudinal research began in the 2010/2011 school year, the children then in the 4<sup>th</sup> and 5<sup>th</sup> grades are today in the 7<sup>th</sup> and the 8<sup>th</sup> grades. Their sympathy choices and the change of their social integration are traceable further.