DOES CATEGORICAL SPECIAL EDUCATION MAKE SENSE? THE FLEMISH SPECIAL EDUCATION SYSTEM IN THE INTERNATIONAL DEBATE

Introduction

In Flanders more than 4% of the pupils in primary education are going to special schools for mildly mentally handicapped children (MMH-schools, 9.915 pupils, 2.4%) and to special schools for children with (serious) learning disabilities (LD-school, 8.029 pupils, 1.9%) (Ministry of the Flemish Community, 1996). The theoretical and practical arguments for the distinction that is made between these two groups of children with learning problems, the nature of which is cognitive (there is, for instance, no sensory or motoric deficiency), are frequently under discussion and have, of course, implications for policy. For reasons of economy investigations are made as to the possibilities of integrating the different types of schools (costcutting through scaling-up) and preventing the growth of special education (costcutting through preventive measures, such as broadening care in regular schools). At the moment the first approach is especially advocated in the Netherlands. An example of the latter method is found in Flanders as well, inter alia in the strategy that has been developed in the project 'Help in learning' by the Federation for Vocational Guidance (C.B.S.O.) and the K.U. Leuven (University of Leuven). For a number of years some forty educational psychologists and special educationists have set up or have given themselves individual remediation in primary schools. One of the chief objectives is to advance the quality of diagnosis and to advise in such a way, that when problems arise, the solution is found preferably in the pupil's own school. (Ghesquière et al., 1997a; Ghesquière, et al., 1997b).

In this contribution we will deal with the different arguments and reasons for justification of the existing situation and define our own position. To do so, we will subsequently go deeper into the definition of the problem, discuss various definitions that are the basis of current practice and deal with the problems that are related to categorical special education. After some discussion we will reach a conclusion.

Definition of the problem

In education, different strategies are being used to help children whose learning process is in danger. First, there are a number of possibilities in the ordinary school. There is the remedial class and the remedial teacher, or the children may not be moved up. Next, a number of children with learning problems land in extramural services, such as ambulatory rehabilitation centres and the services of licensed speech therapists, remedial teachers, neurolinguists, orthopedagogues or psychologists. Finally, a group of children is referred to special education. Children with learning problems but without a physical handicap or primary behavioural problems are found in type 1 (MMH) or in type 8 (LD) schools in Flanders. This structure is found all over the western world (Rispens et al., 1991; Van der Wissel, 1988).

Even though the legislator in Flanders, when classifying special education did not have the intention to discuss types of children, but types of education according to De Fever (1993), the distinction between type 1 and type 8 has to be considered as a classification that is based on child characteristics, mild mental handicap and learning disability respectively. In Anglo-Saxon countries, the classification in "educable mentally retarded" for the one group

and "learning disabled children" for the other is prevailing (Sutaria, 1987). The learning problems of both groups are referred to, by Dumont (1980) among others, as secondary learning problems (mild mental handicap) and primary learning problems (learning disabilities).

However widespread this educational and diagnostic differentiation may be, criticism has been voiced for a considerable time by several authors (Hart de Ruyter, 1949; 1961; Marston, 1987; Phipps, 1982; Sutaria, 1987; Siegel, 1992) and the question of its use is emerging time and again. For one thing, there is the question of its theoretical relevance and validity, for another, the necessity of categorical education facilities that would answer educational needs appropriate to both groups is doubtful.

Definitions as basis of current practice

In Flanders, the classification into different types of special education has been regulated by Royal Decree (R.D.) of 28 June 1978 (Belgian Statute Book of 29 August 1978). Article 6, par. 1 stipulates that type 1, "which is suited to the educational needs of mildly mentally handicapped children and adolescents, is meant for pupils who are not to be considered as educational slow learners and who by means of multidisciplinary examination have been assessed to have a mild developmental delay and/ or mild mental retardation". This definition is clearly aimed at the group of mildly mentally handicapped children. This is emphasised by the exclusion of the so-called 'educational slow learners'. A definition of mild mental handicap, however, is lacking. Furthermore, there is no operationalisation whatever of 'mild' mental handicap and no reference to IQ for instance. All the same, a diagnosis has to be made by an Educational Psychology Service's multi-disciplinary team on the basis of a medical, psychological, pedagogical and social examination (art. 7, 1), which is expected to follow current views.

The definition of the concept 'mental handicap' by the 'American Association on Mental Retardation' is currently generally accepted and recognised all over the world. It is as follows: "Mental Retardation refers to significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behaviour and manifested during the developmental period" (Grossman, 1983). Subaverage general intellectual functioning means that on a standardised intelligence test, the person in question scores at least two standard deviations below the average. On most intelligence scales this corresponds to an IQ below 70. People with an IQ between 55 and 70 are considered to be mildly mentally handicapped. 'Mild retardation' roughly corresponds with the educational concept 'educable mental retardation' (Grossman, 1983).

In article 6, par. 8 of the above mentioned R.D. we read that type 8, "which corresponds to the educational needs of children with serious learning disabilities, is meant for pupils who, although they are normally gifted and their faculties of hearing and seeing are normal, have been assessed by means of a multidisciplinary examination to present disorders of such importance, in language development or in learning to speak and/or write and arithmetic, that special help in regular education is not sufficient". Unlike for the definition of type 1, the law here does give a definition of learning disability, in this case of serious learning disabilities. Several criteria that are being used worldwide (for instance in the DSM-IV of the APA, 1994; Dumont, 1990; Lerner, 1997) for the definition of learning disorders are being proposed more or less explicitly. Here we think of the criteria of normal giftedness, discrepancy and exclusivity. In this there is a large consensus on this domain.

In her discussion of the various definitions of 'specific learning disabilities', Lerner (1997) distinguishes four common elements that are of interest in this context. The first concerns ***specificity*** *of the problem. It pertains to*

problems in language development and/or the acquisition of academic skills such as reading, spelling and arithmetic. Secondly, she points out the ***disharmonic development*** *of the diverse components of general intelligence. This aspect is often used to differentiate learning disabled from mildly mentally handicapped children. In this connection Vlietstra's metaphor of the chandelier is striking: when all the lamps of the chandelier are dimmed, we have a mildly mental handicapped, but if some are turned off and the rest are shining normally, then we have a learning disabled child (cited in van der Wissel, 1978). A third common element in most definitions of learning disabilities is the* ***criterion of discrepancy.*** *Learning disabled children are characterised by an unexpectedly big difference between their potential and their actual achievement in school. Finally, there is the* ***criterion of exclusivity.*** *The surprisingly low performance does not result from another handicap or environmental (educational or socio-economic) influences. Quite a number of authors associate it with the* ***criterion of normality.*** *Learning disabled children are expected not to be mentally handicapped and to have a normal, average general intelligence. Dumont (1990) operationalises this as an IQ equal to or above 85. Incidentally, this calls into being an intermediate group, with an IQ between 70 and 85, which is not covered by the definitions above.*

When based on the above definitions, there do not seem to be any problems at first sight, neither in regard to the diagnostic classification, nor with respect to educational differentiation. Simply on the basis of intelligence test scores both groups can be subdivided exactly in a group with an IQ below 70 and one with an IQ equal to or above 85. Thus the definition of the target groups of various types of special education apparently leaves no room for obscurity. As we have suggested before, however, (and the intermediate group certainly plays a part) it turns out that this is not the case. In the practice of Educational Psychology Services this differentiation proves to be a constant problem (Swinnen, 1986).

Problems related to categorical special education

Educational differentiation?

An important part of the difficulties in educational differentiation (see "Definition of Problem") is a consequence of the strict division of the above target groups, resulting in a group of children with serious learning problems which is situated between both diagnostic categories and which has an IQ between 70 and 85 (Ames, 1977). In practice, one is forced to seek a solution for these pupils in special education when regular education does not offer any possibilities. It is the multidisciplinary team that decides whether type 1 or type 8 is advisable for a specific pupil. Several factors, for example the availability of such schools in the region, may play a role. In this connection, however, there is criticism that the decision is made based especially on information concerning the family's socio-economic environment. Van Gennep (1977), for example, proving that social status is of greater differentiating significance in regard to special education than academic achievement and IQ, declares, "It would be cynical to use socio-economic data as a criterion for selecting a school for the mentally deficient, but this would not be more cynical than reality itself." (p. 80-81). The same criticism is found in Ames (1977), who states that special education for children with learning disabilities in the United States came about only because for some parents the word 'mentally handicapped' was too emotionally loaded. Van der Leij and Kool (1981a) are also convinced of this. "For children who meet the norms as regards social background, but not as regards academic progress, a separate school has been created (LD-school), although learning problems in both categories can show strong resemblances." (p. 162).

Once again, we should realise that these problems are the result not so much of a theoretical obscurity in defining the concepts of mild mental handicap and specific learning disability, but especially of the practice of looking for and referring to adequate care outside regular primary education. Even when surmising that the learning problems of mildly mentally handicapped children are different from those of children with learning disabilities, we realise that the intermediate group and the multidisciplinary team's choices (using restricted instruments) cause an overlap between both types of education that is not to be ignored. This may carry the risk that in practice there is no clear educational differentiation. According to Van der Leij and Kool (1981a) this is the case. After interviewing 50 teachers from LD and MMH-schools, it turned out that the differences between the methods used in schools of one and the same type were as great as those between schools of a different type. However, they indicate that the pace in an MMH-school is reduced and that they use more material.

In the Discussion section we will come back to the fact that these qualitative aspects may be of importance for a necessary educational differentiation. Van der Leij and Kool's criticism of educational differentiation, however, goes deeper. On the basis of data from two regions they declare that both types are comparable as regards their referral to further education. (For Flanders we have no data on this matter.) From their point of view not only the teaching method is the same, but the result as well. What is more, they consider the fact that in an integration-experiment with LD and MMH schools, pupils from both groups showed equal progress - be it on a different level - to be another confirmation of their proposition (Van der Leij and Kool, 1981b; Van der Leij et al., 1984). Marston (1987), on the basis of research into the effect of separate teacher training for both types of education, reaches the same conclusion. No difference in progress is noticeable between mildly mentally handicapped and learning disabled children, no matter which teacher is instructing them.

Fundamental is the question whether it is advisable at all to develop an educational system based on diagnostic classifications of individual pupils. Goldstein et al. (1975) give a summary of the advantages and disadvantages. We take those which are relevant to our discussion and should be taken into account in special education. The advantages are:

1. *The possibility of clear communication between different experts involved in the educational system.*
2. *A simpler and more translucent administration and subsidy scheme. In the United States there is criticism that this might be the most important reason for excluding the mentally handicapped from education for the learning disabled (Sutaria, 1987).*
3. *Continuous community support of special education is guaranteed. Identifying clearly defined groups motivates more than do vague educational objectives.*

Disadvantages include:

1. *Classification is conducive to generalisations concerning individual pupils and obscures individual differences between children in the same category.*
2. *Descriptive categories often operate as explanatory categories, which may lead to circular arguments.*
3. *An educational system of this kind overlooks the interactive character of teaching and confirms the erroneous assumption that a learning disability is found exclusively in the child.*
4. *Descriptive categories often provide information that is irrelevant from an educational point of view but leads the teacher's expectations in a certain direction, the result being a self-fulfilling prophecy.*

5. *There is no immediate and clear connection between diagnostic classification and the corresponding educational needs.*

Diagnostic differentiation?

Criticism of diagnostic differentiation between mildly mentally handicapped children and children with a learning disability can be especially traced back to scepticism about the difference between primary and secondary learning disabilities. More specifically, a number of authors doubt the chief constitutive elements in the definition of 'specific learning disabilities', that is, the criterion of specificity, the disharmonious profile, the criterion of discrepancy and the criterion of exclusivity (see "Definitions as basis of current practice"). We will briefly deal with the major objections.

Especially the ***criterion of discrepancy*** *comes under fire. The first aspect that comes to the fore in this discussion is the fact that there is no necessity for this criterion to discriminate between the two groups. The discrepancy between learning potential and actual learning achievement is in itself independent of the level of intelligence (Sutaria, 1987). It is true that the statistical norm aimed at is very difficult to attain for children who score poorly on intelligence tests. In addition, the criterion of discrepancy does not allow the early detection of serious problems. The pupil would already be far behind before there could be any talk of a learning disability. Prevention, therefore, becomes problematic (Van der Leij and Kool, 1981a).*

One of the major points of criticism is directed at the use of intelligence tests as a measure of learning potential. There are two main arguments. First, it turns out that with normally gifted pupils there is but a relatively limited correlation between intelligence and school progress, from .20 to .60, subject to age (Swinnen, 1986). This correlation may even decrease when the pupils are less skilled (Van der Leij and Kool, 1981a), although it is obvious that, when endowment is substandard, the correlation will increase. The second argument is that IQ is a static measure and in itself does not say a lot about learning as such. The dynamic learning process cannot be expressed in IQ. Moenaert (1991) shows that various alternatives have already been given, including learning potential tests (for a review see Hamers et al., 1993). Yet he regards the success of these attempts as uncertain. Not to be identified with the criticism of the use of IQ as a measure of learning potential is the criticism of the statistical techniques used to assess discrepancy (Swinnen, 1986; Moenaert, 1991; Evans, 1992; Stelwagen, 1993). In a nutshell, it comes down to discrepancy formula making severe psychometric demands on the instruments used and on the knowledge of the relationship between the different scores and the target groups for which they are used. There are no empirical data on the relationship between the different scores. Apart from that, discrepancy in practice is often measured independently of intelligence, that is, by comparing an individual pupil's learning achievement to that of his peers (Rispens, 1989). This method, however, does not take into account the individual possibilities of the pupil in question (Moenaert, 1991).

The criterion of the ***disharmonic development*** *of the diverse components of general intelligence is under discussion as well. Rispens (1989) gives a review of research on the use of profile analysis when diagnosing dyslexia. This leads to the conclusion that there is hardly any basis for expecting to obtain reliable and valid information this way. Answering differential-diagnostic questions based on profile analysis does not seem to be justified. Moenaert (1991) also gives a similar critical analysis of this aspect. Van der Leij and Kool (1981a) report data proving that in practice the intelligence profiles of children from MMH-schools and children from LD-schools are very similar. On this basis they have modified the above chandelier metaphor. "At the most one can refer to a chandelier*

that in general shines faintly and a chandelier that gives more light; the bulbs that are relatively weaker or stronger are nonetheless situated in the same places." (Van der Leil and Kool, 1981a, p. 160). Their conclusion is that this criterion as well does not provide sufficient differentiation between both groups.

As to the ***criterion of specificity,*** *the situation is as follows. When related to problems with the academic skills of reading, spelling and arithmetic, this criterion does not differentiate between children from MMH and those from LD-schools (Van der Leij and Kool, 1981a). In relation to learning disability, specificity, however, is often used in yet another meaning: that of a partial defect. This reveals itself especially in discussions on the definition of dyslexia (Van den Bos, 1991). In this context Moenaert (1991) refers to discrepancies within academic skills. On the basis of a review of research into this matter he concludes, "Significant intra-individual differences as to the subjects of language and arithmetic. Although inherent in the definition of specific learning disability, are mostly believed without sound empirical control. When there was a check all the same, it was impossible to differentiate on the basis of academic discrepancies." (p. 53). A confirmation of this thesis can be found in research carried out by Siegel (1992). "These two groups did not differ in their performance on reading, spelling, phonological processing, or most of the language and memory tasks." (p. 618). This finding is in harmony with teachers' experiences in special education. Van Rijswijk and Zijlmans' research (1988) proves that, whereas formerly the LD-school had to face problems more often in one subject, today one is confronted with important delays in all subjects. Consequently, this criterion too would not provide sufficient differentiation between the target groups of both educational types.*

As to the ***criterion of exclusivity****, it is clear that in both groups there is no question of sensory or physical handicaps being the cause. The exclusion of limited environmental conditions, however, is much more delicate. In this connection we refer to the discussion on socio-economic differences between the two types. Categorisation according to Van der Leij and Kool (1981a) has a discriminating effect. Excluding a mental handicap when defining a primary learning disability is under discussion on the basis of all arguments cited. In the opinion of a number of authors, no valid distinction can be made between the learning problems of mildly mentally handicapped children and those of normally gifted children (Sutaria, 1987).*

But the criticism of the distinction between primary and secondary learning problems is not the only source of scepticism about the diagnostic differentiation between mildly mentally handicapped children and those with learning disabilities. There is also the fact that both groups have a lot of behavioural characteristics in common (Sutaria, 1987). In an exploratory research project in Flanders on behavioural and emotional problems with children who have learning problems (Ghesquière et al, 1997c) the parents declare that they are afflicted largely by problems of a social nature (behaving too young and too independently, being bullied, not being popular . . .) and of attention (unable to concentrate, to be quiet, being impulsive . . .). These problems correspond significantly with the personality of the mildly mentally handicapped youngster and, precisely because of this interrelation, a lot of authors are doubtful about the distinction between both groups (Sutaria, 1987).

Discussion on the problems that have been reported

Educational differentiation after all?

In this contribution we deal especially with categorical special education. It is, however, worthwhile to distinguish that from regular primary education. LD-schools in principle have the same learning goals as regular

primary education, whereas this is not the case with MMH-schools. Integrating both types would therefore be less obvious than integrating LD-schools and regular primary education. In practice, however, MMH, LD and regular primary education can be regarded as three moments on a floating scale with respect to the pupils' intellectual potential (e.g. Resing and Bleichrodt, 1989; Resing, 1990) as well as academic achievement. The idea that, with regard to intellectual abilities, particularly pupils from LD-schools resemble those in regular primary education, has not been proven in practice. In other words, a discussion on the possibility of integrating MMH and LD-schools in principle is striking because of the differences in the objectives they strive for, but obviously realistic in view of what takes place in practice. Even then the question is justified whether it would not be wiser to have a look at the original intention of LD-schools, instead of upgrading practice's imperfections to a principle. If poor practice is used as a standard, it will make no difference to the government whether MMH and LD-schools are integrated or MMH, LD, and regular primary schools. Differences between children in that case are nothing more than a question of level and the solution as simple as irrealistic: the teacher 'only' has to differentiate.

Increase in scale and expansion of care are two different points of view when discussing integration (see 'Introduction'). Both are measures on a macro level, even when the impact of expansion of care is unmistakably on a meso level. Educational differentiation within school will always be part of answering differences in the pupils' need of instruction. In the section "Educational differentiation" we have shown that advocates of an increase in scale are putting forward mainly two arguments: that both types of special education use the same methods and have the same results. This however calls for some reflection.

The first consideration concerns the so-called equal teaching effect. Research referred to reveals that in integration projects pupils from MMH and LD-schools progress at the same rate in learning. There is still a difference in level, but progress is comparable. However, this difference in level is beginning to appear and this apparently implies that both groups are at least showing a tendency to grow apart. In 'Hulp op maat' (Custom made care) (Dienst Onderwijs, Rotterdam, 1993) for instance (a project analysing profiles of care of LD and MMH-schools in Rotterdam - the Netherlands, 1990-1993) learning efficiency in special education is reported. Learning efficiency in reading, spelling and arithmetic in MMH-education per year is 6, 5 and 5 months respectively. For LD-education this is 7, 9 and 8 months. Children in MMH-schools on an average progress almost half a year per year; for LD-schools pupils this is 8 months. A similar learning progress in integration research is only possible when investments in one group are greater than in the other. A closer analysis of research shows that comparable learning progress occurs only when in the research's design, differentiation in the quality of instruction has been provided for and when no 'normal' level has been preset as an objective. Van der Leij and Kool (1981a) rightly point out the differences in learning pace and in the need for concrete material.

Furthermore, in this connection it is necessary to point out the variation research has found in the extent to which both groups are capable of generalising what has been learned. As to arithmetic, Van Luit (1987, p. 164) concludes: "Applicable to the education of pupils with arithmetic disabilities in MMH-schools is the fact that, apart from exceptions, each new step that has to be taken in the sequence of tasks has to be instructed. Mildly mentally handicapped children are incapable of discovery learning, even after a training that has produced learning progress. In other words, even after specific training MMH-pupils are not able to solve arithmetic problems if they have not been taught to do so." Such divergence in the extent to which that which has been learned can be generalised, has also been reported by

Ruijssenaars and Hamers (1989). MMH-pupils show that they need instruction more frequently and basically of another type at each new step taken in the learning process and this instruction alone is by far not always transferable to the next parallel task.

In short, even if with different expediences in instruction both types of pupils can accomplish a learning progress, achievement will gradually diverge, because one group simply transfers what it has learned to other learning situations and by doing so increases its advantages.

The phenomenon above has to do with differences that are situated on the level of pupil characteristics, the micro-level. In our opinion, learning problems should be reported not primarily in terms of how far a pupil is behind his/her peers in the level of performance or of the level of achievement only (for instance the progress made in a specified period of time), but especially in terms that characterise learning as a process, e.g. the components of the learning process where there is a failure; proficiency in making use of instruction; the extent to which that which has been learned is transferred. Differences between pupils with learning problems consist not only in differences in success or level, but certainly also in a need for different instruction. One possibility is to make useful strategies more or less explicit, to call more or less on the pupils' ability to verbalise as a means of directing the thinking process, to let the pupil himself search actively for moments where what has been learned can be used, and to help the pupil in handling strategies of planning and control. In the project 'Help in Learning' we presented in the Introduction, we attempt to bring remediation and the individual need for instruction into harmony, making use of a number of clearly defined principles (see Ruijssenaars et al., 1992; 1993). In practice there may be a consensus as to the methods to be used. This, however, is in sharp contrast to the differences in instructional need that have been observed empirically.

Diagnostic differentiation after all?

We have seen that the criteria for differentiating pupils for MMH and LD-schools in Flanders as such are clear (see Definition of the problem), but that in practice a problem arises because of the so-called intermediate group. This problem is even intensified because the instrument, the usual intelligence test, does not sufficiently differentiate between children whose learning potential is higher and those whose learning potential is lower. Notwithstanding Moenaert's (1991) doubts in this matter, we are convinced that the learning test does offer a solution (see Hamers et al., 1993). Resing (1990) in her research compared learning potential scores (learning tests) with standard intelligence scores and concludes, "On the basis of learning potential scores and academic achievement not less than 37.5% of the LD-pupils would be ranked as MMH-pupils and 5% as primary school pupils. However, on the basis of standard intelligence scores and academic achievement 17.5% of the LD-pupils would be regarded as MMH and 7.5% as primary school pupils. For MMH pupils these differences are less explicit; on the basis of learning potential scores and academic achievement 16.2% would be classified as LD pupils, on the basis of standard IQ scores and academic achievement 24.3% of these pupils would be classified as LD pupils" (p. 184-185). In short, whereas the criteria are clear in principle; differentiation in practice is a problem, because an intermediate group of pupils is also referred to one of both types - using tools that give only limited backing for such a decision.

Conclusion

In "Definition of the problem" we have questioned the theoretical relevance and tenability of the classification in primary and secondary learning problems as well as the need for several educational facilities that would fit this

classification. In our opinion, a theoretical differentiation is defensible when typical differences in the learning process and in the need for instruction are taken into account. In principle, this already answers the question whether diversity in the instruction that is offered is sensible. The combination of this question with the one asking for the best form of organisation, leads to problems, because the criteria for a correct classification in practice turn out to be understood in a very wide sense, whereas the means that are used for its operationalisation are but partially suited to their aim. We, however, believe that it would be unjustifiable to play down and simplify the differences in pupils' instructional need to just differences in learning levels because of inadequacies in practice. In "Educational differentiation" we have reported some disadvantages, borrowed from Goldstein et al. (1975), which are related to the use of diagnostic classification in order to refer individual pupils to different types of education. We can subscribe to these disadvantages insofar as they are to be understood as dangers, but here too applies that one should not throw away the child (the best possible individual approach) with the bathwater (bad practice).

Summary

In Flanders, special education for children with cognitive learning problems, that is, for the mildly mentally handicapped and for the learning disabled, is organised in a categorical (based on diagnostic categories) education system. This structure, which is found all over the Western world, is frequently under discussion. This contribution deals with the different arguments as well as the reasons for justification and criticism of the situation as it is now. On the basis of the international debate concerning categorical education for these children, we present a new perspective for the Flemish special education system.

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