INCLUSIVE STRATEGIES AND BUREAUCRATIC ORGANISATIONS IN INTEGRATED AND SEGREGATED SCHOOL SYSTEMS

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Abstract: The aim of this work has been to study the school situation of students with motor disabilities focusing concepts like integration, segregation, inclusion and self-reliance. Interviewing students, parents and teachers has been the dominant method. The result indicated that schools which had a variation of students – for example in ethnic and socio-cultural backgrounds – were better able to adapt themselves to students with disabilities and their educational needs. Schools with homogeneous student population seemed more liable to use segregated solutions when problems arose. One conclusion in this study is that the issues of integration contra segregation are not crucial to the student's opportunities for participation and co-determination, but rather forms of organization and co-operation within the framework of the respective system.

Introduction

The relative perspective on disability
Disability has for a long time been defined as a *problem located within the individual*. This perspective involves seeing therapy and medical treatment as a way to "cure" people with disabilities. In her thesis, Paulsson (1995) describes how the Thalidomide-disabled children in Sweden grew up in the 60s and 70s mostly in hospitals, where the goal was to make the children as physically independent as possible, and to give them a more normal appearance:

Plaster-cast treatments, operations, and even amputations were performed in attempts to change the Thalidomide-disabled children's functional capacities. In many cases the doctors' intentions were to facilitate prosthetic applications. Some of the operations were also done for cosmetic reasons ... Medical treatment started early in the children's lives, often as early as one year of age, and sometimes even earlier (Paulsson, 1995, pp. 66-67, translated).

As a reaction to this an *environment-related* view evolved. Somewhat simpli-

fied, this can be interpreted by saying that if the environment is sufficiently adapted, disability never appears (Barton, 1999). It is thus a matter of changing and adapting the environment – not the individual.

This social model of disability has been a significant basis for political-ideological arguments when people with disabilities have fought for improved quality of life. But like Sally French (1993), who investigates disability issues and is visually impaired herself, one must ask oneself how often a disability can be *completely* eliminated by adapting the environment.

The character of the impairment can determine the extent to which adaptation of the environment can eliminate disability in a certain situation. Denying this, says French, is a sort of social oppression, since many of the problems that people with disabilities experience are made invisible.

In this study the school-situation of pupils with motor disabilities are studied with particular emphasis on how integrated versus segregated settings create opportunities for independence and autonomy.

There were students in the study with such severe disabilities that almost all of the situations that they had to encounter were disabling. For example, the school-activities themselves were very time-consuming for most of the participants, even when they received assistance and computerised technical aids. Communication with their surroundings for some of the students with severe speech impediments could seldom be compared with communication for non-disabled persons, even with the use of the most advanced technical aids. One of the students was afflicted with chronic pain, and was strongly affected by that. Adaptation of the surrounding environment could increase his possibilities for development and quality of life, but it could not eliminate his pain.

Both the individual and the social perspectives on disability thus risk reducing the problems instead of analysing their complexity. The analysis is facilitated, however, if the disability is viewed as an interaction between the individual and the environment, or as a difference between the ability of the individual and the demands made by the environment.

An anti-reductionist research paradigm

According to Skidmore (1996) three theoretical frameworks guide research into special educational needs: the psycho-medical, the organisational and the sociological. The psycho-medical paradigm has its focus on micro-level phenomena, the organisational on meso-level and the sociological on

macro-level phenomena. All of the existing paradigms share a common limitation, Skidmore claims, and that is their tendency to reductionism:

> ...i.e. to explain an irreducibly complex phenomenon in terms of a single, unidirectional model of causation ... (and concomitantly to suggest that a single form of intervention will be a complete and sufficient solution to this problem) (p. 34).

Like Skidmore, I see special needs as a relational concept instead of a definite category. An attitude like this does not, says Skidmore, exclude studying the student's individual requirements, but these requirements must be observed within the context where they are manifested. This process-oriented point of view should also lead to analysis of a certain condition in school as though it were "a moment in a dynamic of development" (p. 44), or a temporary, provisional solution rather than an immutable structure.

Segregation – integration – inclusion
Segregation, integration, and inclusion are concepts that have been used to describe the degree of participation of persons with different types of disabilities in school and societal activities.

The integration reform developed during the 1960s and 1970s, both in schools and in society at large as a reaction to discrimination, segregation, and labelling. According to Söder (1997) one problem is that evaluation researchers have not been aware of issues about the nature of the environments in which integration takes place. Descriptions of these environments have been diffuse, and at the same time discussed and problematised insufficiently. The environment is assumed to have some kind of responsiveness which makes the desired participation and affiliation possible and natural. Reality is in itself, however, segregating. In most social situations people are offered various opportunities to establish contacts and to achieve social position:

> ... segregation, stratification and even discrimination are ordinary phenomena in every social setting and society. And therefore, of course, they will affect persons with disabilities too, when they enter these settings (Gustafsson & Söder, 1993, p. 11, translated).

The barriers inherent in the "normal" environment can be seen as causing the present tendency toward using the *inclusion* instead of the integration concept in pedagogical discussion (Holm, Holst, Olsen and Perlt, 1997). Instead of stubbornly concentrating on the individual student who is to be integrated, attention should be on the school. According to this view the school should be changed in such a way that it can accept and benefit from the broad variation of students. The

inclusion idea is thus based on the organisational paradigm, and makes the assumption that heterogeneity instead of homogeneity should be the norm within the community. Differences should be seen as a resource, and not as a problem needing to be solved with the aid of curricular tracking and special classes (Braadland, 1997; Tøssebro, 1997).

Skrtic (1991) says that the difficulties in achieving integration have been caused by the school's refusal to question what he calls *professional bureaucracies.* The professional bureaucracy is a performance organisation, not a problem-solving organisation configured to seek a creative solution to each unique need. It consists of specialists in different areas who may share common facilities and resources but nonetheless work quite independently of each other, each with his/her students or clients. The problem of innovation of the level of the professional finds its roots in convergent thinking, in the deductive reasoning of the professional who sees the specific situation in terms of the general concept where new problems are forced into old pigeonholes.

And it is important to recognize that this is not a dysfunction of the professional bureaucracy structure. It is configured precisely to screen out heterogeneity and uncertainty, to fit its clients' needs into one of its standard programs (Skrtic, 1991, p. 177).

Skrtic sets these professional bureaucracies in contrast to *adhocracies,* problem-solving organisations achieved through collaboration. The adhocracy is built on the principle of innovation rather than standardisation – an organisational form that configures itself around work that is so ambiguous and uncertain that the knowledge and skills for doing it are unknown. The division of labour is achieved by professionals from various specialisations on multidisciplinary project teams. The team members work collaboratively under mutual adjustment. Coordination is achieved through informal communication as they invent and reinvent novel problem solutions on an ad hoc basis, a process that requires them to adapt, adjust and revise their conventional theories and practices relative to those of their colleagues. Inclusive education is thus defined as "an attempt to replace the traditional professional bureaucratic structure of schools with the adhocratic form" (Skrtic, Sailor, Gee, 1996, p. 146).

Dependence, independence, and autonomy
The institutional life which preceded the integration phase had a decidedly negative effect on the capacities of many persons with disabilities to develop initiative and self-determination (Seligman, 1975; Kylén, 1981). However, the question is whether the training for integration and physical or practical self-reliance evident in recent

decades hasn't resulted in similar effects. The goals and methods in this training were developed by professional personnel who believed they knew what was best for the person with disabilities (Barron, 1997; Holm et al., 1997; Oliver, 1993).

During the 1990s, independence was declared to be the goal of both organisations for the disabled and the professional groups. Oliver (1993a) states that development, however, got a dubious start since the professionals and people with disabilities often have different definitions of independence:

> Professionals tend to define independence in terms of self-care activities such as washing, dressing, toileting, cooking, and eating without assistance. Disabled people, however, define independence differently, seeing it as the ability to be in control of and make decisions about one's life, rather than doing things alone or without help (Oliver, 1993 a, p. 54).

In connection with people with disabilities, Söder (1989) gives the concept of self-reliance two different meanings – independence and autonomy. *Independence* is the ability to take care of practical tasks without the aid of other people. *Autonomy* is defined as the opportunity to be able to influence, choose, and make decisions which concern one's own existence, even if the person needs varying degrees of assistance to accomplish these choices and decisions in practice.

The period between World War II and the 1980s in Scandinavia is usually considered to be the time of the creation of the welfare state (Holm et al., 1997). It was characterised by the categorisation of people, by pronounced centralisation, and by generally following formal and bureaucratic rules. Solutions to social problems were left to professional groups and financed by the state. Participation in societal activities required training in school and daily life; this training was to give the person with disabilities qualifications for the right to a normal life (op. cit. p. 144).

Since the end of the 1980s the picture has changed. A crisis in the welfare state has caused the growth of the "responsive society", with watchwords like inclusion, decentralisation, self-determination, less bureaucracy and more user influence. According to the idea of a "responsive society", educators must relinquish the training ideology; they must learn to understand and make themselves understood, interpret and offer choices. In other words, they must make communication meaningful in order to help students with disabilities overcome their dependence. It could be said that there is a general educational problem at the basis of this – to structure and steer in the direction of a goal, but also to allow room for participation and influence.

Interpersonal relations thus tend to become more important in this type of organisation.

The aim of the Present Study

The overall aim of this investigation has been to study phenomena like independence and autonomy, focusing on students with motor disabilities in varying kinds of segregated and integrated school environments. Individual characteristics, environmental circumstances and intentional influences in the school situation have been analysed in relation to educational policy and organisation. The purpose has been to investigate how societal, organisational and educational influences affect the lives of the students at different ages and in different types of schools.

Part of this investigation has earlier been reported by Mattson (1994; 1995; 1996a; 1996b).

Method and Implementation

Student groups and selection
In the fall of 1997 the records of the Swedish Agency for Special Education showed a total of 3 222 students with motor disabilities in Sweden. Of these students, about 200 were in special instruction groups in compulsory comprehensive schools, and about 150 in the four special resources upper secon-

dary schools. Other students were being taught in regular classes at the compulsory comprehensive schools and the upper secondary schools in their home districts.

The school organisation in one of two investigated municipalities grew from a tradition carried over from old institutions for children and youth with orthopaedic disabilities, while the other municipality had no such history.

Special instruction groups for students with disabilities in compulsory comprehensive schools or upper secondary schools with therapy departments will in the following be designated *segregated school systems*, even though the term is not completely adequate. The activity is located at the regular schools, and many of the students who took part in this research spent several hours per week in regular classes. According to the Education Act, the students were given the right to extended education time. They were moreover to have their own intervention programme – in the upper secondary school called individual study programme. The municipality is responsible for the school and the county council is responsible for the therapy.

The students who chose to attend regular classes in the schools in their districts can be described as belonging to an *integrated school system*. This term can also be discussed, since some

of the students received several hours per week of special instruction. For example one student attended as many as 13 hours per week of a "little group". The concepts have been chosen, however, to specify school forms at the organisational level, but they do not define the degree of integration the student has achieved.

The students participating in the study constitute a very heterogeneous group with reference to type and degree of impairment and disability. Some of them used wheelchairs and were heavily dependent on personal assistance and technical aids, while others had disabilities which were barely noticeable. The group included students with cerebral palsy impairments, spinal bifida, muscular diseases, rheumatism, and traffic injuries. Some of the students, in addition, were affected by speech impediments, hearing and vision impairments, and perceptual disabilities. Differences were also great in learning potential. An example of this was that in one of the special resources upper secondary schools a student required instruction in certain subjects corresponding to that of the junior level of compulsory school, while the student most advanced in his studies received instruction at the university level (Mattson, 1998).

Students investigated are of course not representative of all pupils with motor disabilities, but individual and environmental variation offers certain oppor-

tunities to generalise some of the results. Studying the school's ability or inability to adapt to these particular students can be likened to examining the other students' school situations with a magnifying glass. The types of problem encountered by the students need not differ, but the degree or extent of the problems often does. Skidmore (1996) claims that studies of the experiences and reactions of minority groups can often provide a clear, accentuated picture of the school's operation in general:

> ... society places on schools a set of demands and expectations which may in themselves be contradictory, and which find expression in the dilemmas experienced by practitioners. The case of special needs may constitute a locus in the education system where these dilemmas are concentrated particularly acutely (Skidmore, 1996 p. 43).

In the literature it is recommended that so-called purposive sampling should be used in qualitative studies; this means that particular settings, persons, or events should consciously be selected in order to be able to describe heterogeneous patterns and problems existing in the area being studied (Maxwell, 1996; Ferguson, 1987; Morse, 1987; Erlandsson, Harris, Skipper, and Allen, 1993). Selection was made in accordance with this principle. Various student groups which differed in that they represented different ages,

different types of class and school systems, and different school forms were selected for the study. Each student was also more or less organisationally segregated or integrated in his/her respective school environment.

The situation in *integrated school systems* was analysed based on interviews with eighteen (18) students in general classes in compulsory comprehensive schools, as well as nine (9) parent units, six (6) teachers and five (5) headmasters at this type of school. The analysis of situation at the upper secondary integrated schools was based on interviews with twelve (12) students.

The situation in *segregated school systems* was based on interviews with nine (9) parents and sixteen (16) teachers at compulsory comprehensive schools and sixteen (16) students, seven (7) teachers, two (2) headmasters, two (2) physiotherapists and three (3) boarding-house personnel in upper secondary schools with therapy departments were interviewed

Triangulation
The investigation is based upon three triangulation strategies (Denzin, 1997). The first strategy is composed of different theoretical perspectives. The second strategy consists of different methods, mainly interviews, but also questionnaires, observations, and teachers' written case histories. The third is composed of different sources of information, for instance students, parents, teachers, school principals, school boarding house personnel, and therapy personnel.

Choice of method
The reason why the study is based to a great extent on interviews is because this method is supposed to provide a relevant and reliable insight into the students', parents' and personnel's experiences. Another reason for using interviewing as the dominant method is that the group is small but varied in both the nature of their disabilities and in personal qualifications, interests, experiences, and circumstances; thus other instruments for data collection are not so well-suited for the purpose.

Results

Segregated systems
What differed for the students in *special instruction groups in compulsory comprehensive schools with therapy departments* compared to regular schools was that they had access to specially-destined resources, but also that students and parents had consciously chosen this school form as an alternative to regular classes.

Almost all the parents thought that the school's primary task is to provide knowledge. None of the parents were aware, however, that the student has a right to an intervention programme. One parent thought that therapy

controlled instruction to such an extent that there were too few group activities and too much individual work. Other parents wondered whether the demands made of the students were not unnecessarily low.

Most of the teachers also thought that the school's primary task is to provide knowledge but some of them emphasised social and security aims. However, some teachers considered the parents to be more interested in the therapy than in the school instruction. One explanation for the lack of intervention programmes was that the teachers found it difficult to do long-term planning, since things could always happen that disturbed the plans:

> It's not easy to make predictions for these pupils. Everything takes longer. There's so much that gets in the way of the plans one has made. It's easier to describe it when one sees it in retrospect (quotation from Mattson, 1995 p. 253).

Like the parents, most of the teachers thought that therapy acted as a distraction, and that it intruded upon the teaching process. Some pointed out that these students received in total less instruction than their able-bodied schoolmates but it was also emphasised that some students needed physical therapy in order to be strong enough to manage the school day. The different occupational groups had, however, no formal common planning or evaluation of the student's overall activities. Some of the teachers' comments agreed with what emerged in some of the parent interviews, saying that the educational instruction often came second in importance.

The students in the *special resources upper secondary schools* constituted a very heterogeneous group with reference to, among other things, disabilities, interests, aptitudes, and experiences. The only common denominator was actually that they had some kind of motor disability, and that they had sought and gained admission to a special resources upper secondary school. They had also had varying motives for seeking admission. The student interviews revealed that in some cases they had made the decisions based on their own expressed needs, e.g. therapy during school hours, extended study time, and specially adapted instruction. Other reasons were access to handicap sports or to friends who also had disabilities. Some reported negative experiences of regular classes in compulsory comprehensive school.

In other cases, however, the municipality had influenced their decisions by the fact that the school buildings were not physically adapted, or that the municipality declared itself incapable of satisfying the student's requirements. Students thus, had varying opportunities of making their own decisions about schooling and education.

The special resources of upper secondary school operations looked different in the two locations studied because of different interpretations of statutes and curricula, and how resources were distributed and work routines set up. The *larger municipality,* which had a long tradition of institutions for students with disabilities, had a larger number of students in special resources upper secondary schools The students were mostly divided up between two or three programmes. About half of them belonged to permanent small groups containing only students with motor disabilities. According to the director of studies these were never given extended education times since it was believed that they could not avail themselves of more instruction than what they received in three years. Extended education time was, however, quite frequent among the special resources upper secondary school students who attended regular classes.

An individual study plan was formulated at the beginning of the school year by the director of studies and the study and occupational guidance counsellor. It was presented to the student and his/her parents as a suggestion, and evaluated when necessary.

Some teachers considered therapy during school hours to be very important to the student. Others were very negative about having the student leave classes for therapy, and thought that it could be done at some other time. In the larger municipality there were reports of problems in the co-operation between teachers and therapy personnel (Heimdahl Mattson, 1998).

Students often felt that professional "helpers" − teachers, study and occupational guidance counsellors, physical therapists, speech therapists, and occupational therapists − believed that they knew what was best for the students. This contributed to the students not feeling that they had much opportunity to make their own choices and decisions regarding their education and their school environments:

> I should have been allowed to make my own mistakes. I'm sure I would have managed these studies (economics). Now I know that I don't have that kind of interests but then I could have changed subjects and made my own decisions (quotation from Mattson, 1994, p. 122).

The upper secondary school with special resources in the *smaller municipality,* which had no tradition of institutions for students with disabilities. The students could choose between 16 programmes distributed between five schools. Small groups were mostly used only as a temporary solution, or in certain subjects. All students had extended education time, with the explanation that therapy took so much of the instruction time. A

common plan was made for the student's schooling, therapy, and living quarters, and this was re-evaluated continually. The idea was that the student should participate actively in planning and evaluation groups. In this municipality the students thought that they had relatively good opportunities of influencing their own situation, e.g. when it came to arranging and planning their learning.

Integrated systems
It can hardly be said that the students with disabilities who attended regular classes in *compulsory comprehensive schools* or in *regular upper secondary schools* actually refused the opportunity of attending special instruction groups or a special resources upper secondary school, since the information about these alternatives was rather random.

What these students had in common was that they had no specially-destined resources. It was also a characteristic of the integrated system that there was a prevalent attitude among the school personnel of treating the students with disabilities "just like all the others". This was especially pronounced in the cases of students with less severe or not very visible disabilities. One example of this situation was a student with a rheumatic disease which manifested itself intermittently. This meant that he sometimes could not climb the stairs or write. The school's passive attitude on physical and educational adaptation – e.g. no elevator, no computer, no

assistance – had forced this student to stay at home for long periods. Thus the school's lack of adaptation, in combination with the student's impairment, had caused a disability which otherwise would not have had to appear, or at least would not have been as pronounced (Mattson, 1996b).

Students with more severe disabilities seemed to receive more directed resources. This contributed, in some situations, to the disability being either limited or eliminated. An example was a student with a very severe disability, who attended a compulsory comprehensive school where attempts were made to adapt the school facilities to his needs. He also had his own intervention programme and access to a place to rest. All of these factors made it possible for him to complete his schooling in a way that was satisfactory to him (Mattson, 1996b).

A few of the students in classes seven to nine as well as in the regular upper secondary school received some form of intervention programme or individual study programme. The others, however, did not have more opportunities than their non-disabled peers to influence their school situations. The influence which the younger students' parents had was in most cases similar to the influence exerted by other parents.

It seemed that those schools which had a broad variation of students – for example in ethnic and socio-cultural

backgrounds – were better able to adapt themselves to students with disabilities. Schools with homogeneous student populations seemed more liable to use segregated solutions when problems arose.

Independence and autonomy in segregated and integrated systems
Therapy was dominant in some of the *segregated systems* described. Great importance was attached to developing the students' physical and practical capabilities in order that they would be able to manage the practical aspects of life, without help from others. This is defined here as *independence*.

By teaching the student to read, write, and how to keep oneself informed, the system could be said to be giving students the tools for *autonomy* – the ability to make their own decisions and control their lives. But since education within the segregated systems often took second place, the autonomy goals received less importance. Professionals often decided what was best for the students, and this reduced their opportunities for control. For example, no intervention programmes were set up together with students and parents in the special instruction groups. With the exception of the first planning meeting, it did not appear that students in the special resources upper secondary school in the larger municipality took part in the different meetings which were held continually about their school situations. Nor did they have access to

extended study time if they attended a small group.

In one of the segregated systems there was, though, an organisation for co-operation between student, therapy, housing, and school. The student had, with this method, greater influence over the goals set up for a certain activity. Thus independence or autonomy became more of an individual issue that was decided upon together with the student, depending on his/her needs at a given point in time.

There was a risk in the *integrated systems* that a student with disabilities could be treated as just one of many students. This resulted in a lack of intervention programmes or individual study programmes, and the student received less opportunity to influence the situation. It seemed to be easier for the students who had more severe and/or more apparent disabilities to receive more directed resources. They were usually able to influence their educational situation to a greater extent.

All told, students and parents in segregated compulsory comprehensive schools had very little control of the situation. The treatment goals dominated over the educational goals. Thereby the student got less instruction than his or her able-bodied schoolmates.

In segregated upper secondary schools in the larger municipality the circumstances were about the same as in the

segregated comprehensive compulsory schools. In the smaller municipality, though, the students had good opportunities to influence their own situations in an operation characterised by flexibility and co-operation, where the student was a key person.

In the integrated systems the teachers treated students with less severe impairments like all the other students, which could increase the disability in a certain situation, or even cause it. Students with more severe impairments received more directed resources and more often had individual study programs. This allowed the student some influence and could diminish or even eliminate the disability.

It seemed that schools with a broad variation of students often functioned more like adhocracies or inclusive schools, while schools with homogeneous student populations worked more like professional bureaucracies in a segregating direction.

Discussion

Based on results from the study, it appears that it is not primarily the type and degree of disability which is the deciding factor in whether the student's schooling takes place in the segregated or the integrated system. More significant is where the students happened to live, what information they may have received, what previous experience they had had, how various resources were evaluated, or to what extent the municipality was able to adapt to the students' requirements. This would indicate that those students who are enrolled segregated school systems have peers in the integrated system who have similar disabilities.

Educational attitudes and student variation
According to the results of these studies, there are three possible attitudes to be taken within the *integrated system*. One is to regard the student with disabilities like all the other students, as one of a homogeneous group of people. In this case, little or nothing is done to adapt the educational environment to the student's disabilities. A second attitude is to regard the student as being very special in a group that otherwise is assumed to have similar qualifications and requirements. This involves a segregating attitude towards the student who is considered to differ from the "norm". A third attitude is described by Skrtic et al. (1996): to observe, evaluate, and use the variation between individuals in a stimulating way. This strategy is often a necessity in schools having, for example, many different ethnic groups and/or social problems. The results show that the educators' interest in adapting to and using this variation is also advantageous for students with disabilities.

Within the *segregated system* there are also different pedagogical ways of

handling heterogeneity. One is to form small, permanent groups and thus build on the idea of the significance of the homogeneous group to the teaching results (Tøssebro, 1997). The problem with this is simply that even though the group is small, the students' varying types of orthopaedic impairments and possible additional disabilities will probably make it extremely heterogeneous anyway, and some of the expected educational rewards are questionable.

However, the extra resources which are always attached to the segregated systems can also be used to create a more flexible organisation where arrangements, groupings, and teaching methods vary with different students and for different periods. This effort to maximize the alternatives and the environmental adaptation contributes to the disability being minimised, or not even appearing at all.

There are thus examples within both the segregated and integrated systems of local schools which have tried to make room for flexibility and alternatives, and hence adaptation to the students' requirements. A common characteristic of these schools was that teachers and other occupational groups tried to solve problems by continually and informally co-operating with each other and with the students and parents. Skrtic et al. (1996) regard this as typical for so-called *adhocracies*, problem-solving organizations, or inclusive schools. One

example of such an organisation is the segregated special upper secondary school in the smaller municipality. Another is the situation of some students with severe disabilities in general classes in compulsory comprehensive schools or upper secondary schools.

There were also examples within both systems of the opposite, schools which can be described as *professional bureaucracies* or performance organizations – "nonadaptable structures designed to perfect the existing practices and standard operating" (p. 145), with different occupational groups and specialists who did not cooperate as teams but rather worked fairly independently of each other with standardised solutions and general concepts. An example of this in the study was the special resources upper secondary school in the larger municipality. Another example was the situation of students with less severe disabilities in integrated school systems who often were treated "like everybody else".

The myth of the homogeneous student group
A frequent and basic problem in school is that students are often assumed to be alike, until one is defined as deviating. Homogeneity is seen as the normal condition which is to be maintained, and therefore heterogeneity becomes a problem which must be minimised.

Students with motor disabilities make up a little but sometimes very visible part of the *total* student variation. This variation consists of children and young people who at the same age represent a range of different levels of maturity, different kinds of talents, personalities, interests, and life experiences. When this heterogeneity is ignored instead of being taken as a starting point in the educational operations, the interest in the students as individuals decreases. The possibility of influencing the students own educational situation is an important stimulation factor in learning (Mattson, 1994), which is thus disregarded.

The students whose school situations have been described in this work are a threat to the myth of the homogeneous student group. The school then has a tendency to react in one of two ways. The first is to assume that the student belongs to the homogeneous group, and thus no special adaptations or consider-ations need to be made. However, if the disability is all too evident, educational and organisational solutions will be arranged outside the framework of the group, for the purpose of maintaining the desired "normal state". The school's desperate efforts to achieve homo-geneity and "normality" is legitimatised in this case on the macro level by the existence of separate segregated school systems.

Inclusion instead of integration – a paradigm shift?
One conclusion in this study is that the issues of integration contra segregation are not crucial to the student's opportunities for participation and co-determination, but rather that it is organisation and forms of co-operation within the framework of the respective system that are more important. Thus, the boundary line can be said to be drawn between so-called professional bureaucracies and adhocracies.

So, what makes some schools function as professional bureaucracies chara-cterised by lack of co-operation with static solutions? And why do others develop into adhocracies, where different professional categories co-operate both with each other and with the students and parents, and where attempts are made to respond to heterogeneity and problems with flexible and individually adapted solutions?

One assumption is that old school traditions are ingrained and difficult to change. Examples of professional bureaucracies in this study are mainly found in the large municipality with a long history of caring for children and young persons with motor disabilities. This was true of both the special resources upper secondary school and special instruction groups in the compulsory schools with physical therapy departments. These acted as a modern extension of activities which were established at the end of the

nineteenth century. The special resources upper secondary school in the smaller municipality, however, was not burdened with any such institutional traditions, as it was quite recently started. This fact had probably contributed to the development of a more adhocratic or "inclusive" system.

Another assumption is that schools with heterogeneous student bodies are forced to solve problems in a more flexible and less tradition-bound way. Schools with less variety among their students, however, the so-called "stable" schools, can more easily develop and retain professional bureaucracies.

Independence and autonomy
It is true that people with more severe disabilities will always be dependent on other people's practical help. Because of this, the ability to assert one's own opinion and influence one's surroundings is especially important. Thus, the more severe the disability, the greater the need for autonomy.

However, to assert that autonomy is always more important than independence for people with disabilities would hardly benefit them. It would be to deny the fact that needs vary between different people as well as for one individual at different points in time and in different situations. By the definition of autonomy, the individual person must instead have the right to decide when he/she wants to develop his/her autonomous capacities or his/her

independence. In the school this requires a flexible and co-operation-oriented climate in which students and parents are guaranteed continuous opportunities of influence. This description fits the definition of adhocratic or inclusive schools.

One question is whether the development of independence interacts with the development of autonomy. Does, for example, an individual become more autonomous if the dependence on other people is reduced, or is the need for managing practical things on one's own less important if one becomes more autonomous? Barron (1997) claims that this issue also is a question of gender and that disability research has tended to neglect the impact of gender roles since the focus has been on the impairment. This raises another question: If the importance of self-reliance can be different for boys and girls, how are their demands with regard to schooling related to such differences?

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