Education of the deaf in Australia and Norway: A comparative study of the
interpretations and applications of inclusion

Merv Hyde, Stein Erik Ohna and Oddvar Hjulstad

Abstract

“Inclusion” is a term and process that is culturally, politically, medically, philosophically and historically relative in its interpretations in education of the deaf. This study undertakes a comparative analysis of two substantially different education systems for deaf students, in Norway and Australia, to elucidate the sources of some of these differences and to examine the interpretations and applications of inclusion that are inherent in their policies, practices and in recent research evaluations. It is observed that both countries recognize their respective sign languages (Auslan and Norwegian Sign Language) and deaf communities, while at the same time endorsing in policy and practice inclusion of deaf children within regular school settings. There are, however, significant differences in the national contexts in which inclusion is understood and applied. Australia is a system of federated states, with state and territory responsibility for education, and there is no specified set of national curricula and some variation in the implementation of state policies directed at inclusion. Norway, with a much smaller population, has legislation (§2-6 of the Act of Education) directed at a “school for all” approach and a set of national curricula along with specific syllabi for the deaf.

In recent research evaluations it is noted that 83% of deaf and hard of hearing children in Australia are in regular classrooms and being taught orally. One third of deaf children in Norway are in regular classes with NSL being employed. These students also receive short-term clustering arrangements at Resource Centres for deaf students to promote competence in NSL and to access social and linguistic networks. The remaining students are in schools or classes for deaf students, with a number of students with lesser degrees of hearing loss in regular classes but not falling under the provisions of §2-6 of the Act of Education.

Results from Australia report relative satisfaction with academic performance, but with a majority of deaf and hard of hearing students having difficulties with socialization; two-thirds being rated by their teachers at competitive levels academically, but only one-third being socially well integrated. In Norway, observation of classes suggest that there is little interaction among deaf and hearing children in the three instructional models examined and that instruction and communication tend to be of a parallel nature, with the exception of one class model where the teacher both signed and spoke and required to hearing students to sign. In both countries the transition from policy to practice would seem to be questionable.

Education of the deaf in Australia and Norway: A comparative study of the interpretations and applications of inclusion

“Inclusion” is a term and process that is culturally, politically, medically, philosophically and historically relative in its interpretations in education and in life. It is usually considered that schools and the education they provide should reflect the values and objectives of the society in which they are embedded, including inter alia preparation for a future life personally, socially and vocationally. This can result in some schools or school systems adopting an organisational structure and practices for deaf students that are more “special” and separate rather than the placement in general classes/regular school model that is considered by many to be a primary focus for the processes of inclusion (Hyde & Power, in press, Luckner, 1999; 2001).

Some countries and their school systems see education for deaf students as different from regular education, particularly in the light of the philosophical, cultural, social and linguistic perspectives that they adopt about the status of “deafness”, sign language and of “deaf communities”, including the recognition of characteristics of such communities (Johnston, in press, Bagga Gupta, 2001). They see schooling as only a part of a range of inclusion experiences, where home, family, child care and a wide range of social encounters are equally, if not more important (Wall, 2000). Therefore, in achieving a balance, schooling in such systems that is able to best respond to the deaf student’s special needs may still be segregated to some degree (Croyle, 2003). As such, they may continue to provide some separate or special education and schooling for these students to prepare them for a future life that is based on developing, in their terms, a native sign language as a first language, a strong self concept, or in the terms of some writers, “a Deaf identity”, (Bat-Chava, 1993, Bat-Chava, 2000).

This can be seen in contrast to portrayals of the “school for all” position (Rosenqvist, & Gustavsson, 1993; Stainback, Stainback, & Forest, 1989) where school, and specifically the “general classes” model (Luckner, 1999; Hyde & Power, 2003), is viewed as an indivisible part of the overall inclusion process. Within the school for all philosophical approach, a single school or school system may be initially designed or subsequently accommodated to accept all students and to be tolerant of and responsive to their diversity and individual needs, because “it is simply the fair, ethical and equitable thing to do” (Mastropieri & Scruggs, 2000, p. 23), or “because it is the right thing to do” (Winzer, 2000, p. 9). That is, deaf children should attend the local school that they would have expected to attend if they were not deaf (Winzer, 2000). There are also some positions that attempt to bridge between the general classes model and the special school model, including the use of “co-enrolment” or “co-teaching” designs (Luckner, 1999; Stinson & Kluwin, 2003; Walther-Thomas, Bryant, & Land, 1996).

In summary, some clarification of the terms “integration”, “mainstreaming” and “inclusion” is required as these terms are differently used by researchers, commentators and education authorities (Stinson & Antia, 2001; Powers, 2002). Foreman (2001) and Ashman and Elkins (2002) describe “integration” as referring to a student’s attendance at a less segregated setting than a special school—which could include a special education class in a regular school or a regular class. “Mainstreamed” is described as being enrolled in and participating in a regular class. Mainstreamed students may or may not be

"included". "Inclusion" is often described as the outcome of a process whereby schools attempt to provide for the personal, social and learning needs of all their students. Powers (1996a, b) in England declared "inclusion is an attitude not a place"; students could be "integrated" without being "included", and that inclusion would need to "extend the scope of the ordinary school (p. 37)".

Decisions by states or other authorities about the nature of the education services they provide for deaf students thus may be based on many factors including the imperatives established by national curriculum statements, interpretations of research, experiences from their histories, the relative dominance of various stakeholder groups in decision-making processes, cultural interpretations, financial factors, the demography of the deaf and hard of hearing population, medical and audiological descriptions of hearing loss, beliefs about the role of technology and the philosophical position(s) adopted, particularly those involving the rights of children, parents and of minority groups.

In consequence, the following analysis of two substantially different education systems for deaf students, Norway and Australia, is conducted to elucidate the sources of some of these differences and to examine the interpretations and applications of "inclusion" that are inherent in their policies, practices and evaluations. It is hoped that such an examination will further inform our understanding of this term in current and future use.

Description of the two systems

Australia

Australia is a nation of six federated states and two territories, where each state or territory is responsible for its education system, including matters of structure, policy, funding, curriculum and practice. While there are agreed national curriculum "key learning areas" and "common goals for Australian schools", there are no set national curriculum statements and limited direction to schools and schools' authorities about the nature of education services for students with a hearing loss. The national government has a Disability Discrimination Bill (1992) and each state has separate Anti-Discrimination legislation (proclaimed in various states from 1978 to 1992). These laws are built around principles of social justice, including access, participation, and equity of outcome. They designed to be largely educative and preventative in focus, but necessarily are protective of the rights of people with a disability or cultural difference against forms of discrimination. Australia is required to comply with the UN International Convention of the Rights of the Child and has significant national and states' policies in the area of "multiculturalism" and a National Language Policy (Lo Bianco, 1987) that include the recognition of Australian Sign Language (Auslan) as a community language and recognition of the status of the Deaf Community.

Each state can therefore, have somewhat different objectives, policies, systems and practices reflected in its education systems, school structures and curricula. These differences are not, however, substantial and usually relate to variations in grade sequences, school commencement ages, curriculum outlines, tertiary entrance assessment procedures and the balance between independent and government schools.

Schools are organised into preschools (usually for 4 to 5 year-old children), primary schools (usually of 7 grades up to 12 years of age) and secondary/high schools (usually of 5

grades up to 17 years of age). All these levels are free and compulsory in the state systems. Postsecondary options include technical/community colleges, universities and private colleges. There are different proportions of private or independent schools in Australian states, but in the special school or special education sector these are relatively few in number and usually limited to schools supported by private associations, foundations or church authorities. Some are dedicated to programs for deaf students.

Deaf students can participate at all levels in regular schools and post-school institutions or may be enrolled in special schools or in special education units (with one or more separate classes) that are part of regular schools. Deaf students who are in special schools or special classes are usually those “ascertained” with the highest support needs, particularly for communication, or who may have an additional sensory, developmental, intellectual or behavioural disability. Those in the regular school “units” for deaf students will usually be taught daily with other deaf children by teachers of the deaf, with opportunities to join regular classes where their capabilities are judged to allow. Those who are placed fulltime in a regular school classes receive varying levels of specialist support from itinerant teachers of the deaf and specialist aides. They will usually be the only deaf student in their school. There are also early intervention/preschool programs specifically for deaf students in each state.

The limited number of independent programs for deaf students mainly consists of schools with an auditory-oral or auditory-verbal approach to communication and involving inclusion in regular classes, and those using Auslan in bilingual programs. This latter school type has been established in recent years in most states for parents who wish their children to be instructed in Auslan, with English learned as a second (often only as a written) language. Typically, these are small programs and mostly involve deaf children of deaf parents, but also include some deaf students from hearing families and some hearing children from deaf families.

The establishment of some independent programs adopting a strict regime of auditory-verbal “therapy” for parents and deaf children has been a notable feature of post-implantation provision in many states. These programs generally impose a strict aural regime and do not accept the use of any signed communication at home or at school (see Power & Hyde, 1997 for a critique of such programs).

Currently therefore, the state deaf units, or the very few remaining special schools for deaf students, use either a bilingual/bicultural program (Auslan/English) or Australasian Signed English (a sign system developed to represent the morphology of spoken English and presented by teachers in a Simultaneous Communication mode (Hyde & Power, 1991; Power, Hyde & Leigh, 1996). Recent research has shown that the substantial majority of deaf and hard of hearing students (that is, all Australian students with a hearing loss that is moderate or greater in level as defined by Australian Hearing Services) in Australia are placed in regular classes. Hyde and Power (2003) found that, across states and territories, 83% of these deaf and hard of hearing students (37% profoundly deaf, i.e., average better-ear hearing loss greater than 91 dB) were in orally-communicating regular school classes, receiving some support from a visiting teacher of the deaf, according to their determined needs. This is considered to be a very high rate of general classes placement by world standards (Holden-Pitt & Diaz, 1998 in the USA; Fortnum et al., 2002 in the UK).

In summary, Australia's services for students with a hearing loss are provided by individual states. The states develop policies and procedures that they believe respond to community expectations and are within their own philosophical and social interpretations of "inclusion" – a term that is currently described, with some variation, in the policies of these state authorities. These policies and procedures, while recognising the cultural and linguistic characteristics of "Deafness", are largely directed at regular school placement and learning support in mainly auditory-oral communication settings.

Norway

Norway's current ideology of inclusive education can be traced back to the 1960s and best understood in the context of broader historical and social changes to its welfare state (Flem & Keller, 2000; Vislie, 1995). The reorganisation of special education began late in the 1960s and equality, integration, normalisation, participation and decentralisation were important principles of this reorganisation. New laws established the ideology of "integration" and what was called "adjusted" education. In 1975 the Integration Act incorporated the Act of 1951 relating to provision of special schools and specific regulations for the administration of special education were eliminated (Flem & Keller, 2000). In 1992, the former state schools for special education were developed into a system of 20 regional Resource Centres. These centres arrange courses for parents and teachers and provide guidance and counselling, as well as being involved in the assessment of students with special needs. The main objective of the Centres is to support local services in municipalities and schools.

Since 1975, the 435 municipalities have been responsible for the education of all students, who have the right to be educated in their local schools (Dalen, 1994). The Act of Education of 1998, §1-2 emphasises "adjusted" education as a legal right for all students (Act of Education, KUF, 1998). In the national curricula for compulsory education this is explained in the following way: "The compulsory school is based on the principle of one school for all. The compulsory school shall provide equitable and suitably adjusted education for everyone in a coordinated system of schooling based on the same curriculum." (KUF, 1996, p. 56). Adjusted education is presented as, "All pupils, including those with special difficulties or special abilities in certain areas, must be given challenges corresponding to their abilities. If all pupils are to receive schooling of equal value, individual adaptation is essential" (KUF, 1996, p. 58). The 1998 Act of Education introduced 10 years compulsory education. Primary and secondary schools cover 10 years (from six-15 years of age) and students who have completed compulsory education have the right to three years' full-time upper secondary education. Postsecondary (vocational and higher education) includes four universities and a range of colleges.

The national discussion of integration and inclusion focussed on the concept of "the student's own environment". Two opposite interpretations were highlighted, one emphasising the student's "own environment" as being the local municipality school and the neighbourhood as "home", the other emphasising "own environment" as a place where there was access to and participation with other (deaf) pupils and adults using Norwegian Sign Language (NSL).

Between 1992 and 1997 several national initiatives were taken that had a significant impact on education of deaf students within a "school for all" concept. Students who had

acquired NSL as their first language, were given the right to education through the medium of the sign language (§2-6 Act of Education, KUF, 1998). Further, the National Curriculum for the 10-year compulsory education (KUF, 1996), introduced four new syllabi for students educated according to §2-6: Norwegian Sign Language, Norwegian for deaf pupils, English for deaf pupils, and Drama and Rhythmics for deaf pupils. The important difference between the three latter syllabi and the regular syllabi in Norwegian, English and Music being that the oral aspects, involving sound and speech, are replaced with suitably adapted signed forms (KUF, 1998, p. 11).

With the introduction of these policies, other initiatives were taken to enhance the status and the competence of NSL use in schools and in families with deaf children. To meet regular teachers' needs for competence a program in NSL was developed at some universities and university colleges. Teachers who are educating deaf students according to §2-6, must have competence in NSL at the level equivalent to one half year of full time study. A similar program in sign language was established for hearing parents with deaf children. The parents are entitled to 40 weeks training in NSL through the first 16 years of the child's life.

While the legislation gives all students in Norway the right to attend a school in their neighbourhood (Skarbrevik, 2001), it also gives deaf students right to education through the medium of NSL. The student's level of hearing impairment, whether moderate, severe, or profound hearing loss does not have any impact on the legal right to education under §2-6 in the Act of Education. However, deaf students do not have a legal right to education within a school for the deaf. When the former state schools for special education in 1992 were developed into regional resource centres they were given three primary roles: (i) offering long term and short term education for groups of deaf children, based on a bilingual approach, (ii) offering on-campus and off-campus consultative services for local educational institutions with deaf- and hard-of-hearing students, and (iii) offering programs in NSL for hearing parents with deaf children.

In summary, the education of deaf students in Norway has become more complex in recent decades. First, education of deaf students is influenced by national policies, national curricula and changing practices in education in general. Second, when deaf students enter regular municipality schools, their legal right to access to NSL needs to be supported. The regional resource centre for the deaf students is required to co-operate with municipality schools in offering education and professional development in and about NSL. Students following the national syllabi for the deaf have to relate to two different schools: the local municipality school and the school at a Resource Centre for deaf students.

In 2001/2002 there were nearly 350 students in compulsory education (6-16 years) following the syllabi for deaf in Norway. Approximately one-third of these students are educated at their local municipality school, which means that they may belong to a class as the only student using NSL. The remaining two-thirds are educated at special schools or classes for deaf students, either within a regular municipality school or at a resource centre for the hearing impaired. There are, of course, other students with degrees of hearing loss in regular classes in municipality schools who communicate in auditory-oral modes and receive some learning and communication support, but not normally from teachers of the deaf. The number of these students is significantly less than the number of students following the syllabi for deaf. When a student is educated according to the syllabi for the

deaf, the school receives additional teacher resources to accommodate the need for communication with NSL. These resources can be used to provide two teachers for a classroom or to lower the class teacher-to-pupil ratio with a smaller class size. These decisions are made at regional and school levels according to their traditions, values and objectives.

Two recent studies of inclusion in practice in Australia and Norway

Two studies summarised below describe these policies and practices in operation in the two countries and provide a further basis for comparison.

Australia

To investigate the work of itinerant teachers of the deaf and the characteristics of the students they supported in regular schools, a questionnaire was constructed which consisted of three sections: one which asked about the training and experience of the teachers, one about the characteristics of their work as itinerant teachers and one which attempted to build a picture of a “sample” student who was receiving support from an itinerant teacher. Various findings from this large study are reported in Power and Hyde (2002), Hyde and Power (2003), Hyde and Power (in press) and Power and Hyde (2003). Only findings regarding the students’ “participation” in regular schools are reported here as this feature most reflects the issues examined in the current analysis.

The study reported that a significant majority (83%) of deaf students in Australia attend regular schools and are placed in regular classes. There would seem to be evidence of increasing levels of hearing loss among the deaf students being placed in regular classes in Australia. Thirty percent had a moderate (41-70 dB) loss, 32% a severe loss (71-90 dB) and a somewhat surprisingly large 32% were reported as having profound hearing losses (greater than 90dB). It has often been considered in Australia that children with profound losses are mostly found in educational programs in special education units or schools for the deaf so it is significant that just short of one-third of the students reported to be receiving itinerant teachers’ services in regular classes are in the profound hearing loss range and collectively, 64% of these students in regular classes have a severe or profound hearing loss.

There has been considerable debate regarding what constitutes successful integration of deaf and hard of hearing students in regular classes but it has been argued that a main goal of an inclusion model is that it should involve social as well as dimensions of participation with hearing peers and classmates (for an overview see Stinson & Antia, 1999). Others have argued that to be socially involved is insufficient without a high degree of competitive academic involvement, even though some deaf and hard of hearing people, when reflecting on their integrated school experiences, have said that they often felt lonely and isolated socially, even if they were successful academically (Leigh, 1999; Gregory, Bishop & Sheldon, 1995; Byrnes, et al. 2002).

Student data from the study, based on the Mirenda’s (1998) participation analysis procedure (see Power & Hyde, 2002 for a description), show that 81% of the students spent over three-quarters of their time in regular classes and were considered by their class teachers and the itinerant teachers to be in a placement that best met their needs. The considerable time not spent in their regular classes mainly involved their being withdrawn for specialist instruction, particularly by an itinerant teacher of the deaf. The data also show

that over two-thirds of the students were considered to be performing at a “competitive” level (Mirenda, 1998) academically when compared to their hearing peers, 14% were “active” and 17% only “involved” in an academically minimal manner. However, the data on their levels of independence and social participation presented a different picture.

In contrast with academic competitiveness, as far as social integration is concerned only one-third of the Australian deaf students were regarded as being well-integrated with their hearing peers with another 30% seen as “going along with” the school activities without playing a significant role in their planning and execution. Only one-third of these students were reported as being “completely independent” in the academic and social life in their classrooms and 46% as being “independent with support”. The long-standing concern about what constitutes “successful integration”—academic and/or social variables—was not resolved by these findings, but they do not provide a compelling picture of a high level of social participation and independence of these students in regular school life.

Other variables reflecting on the characteristics of the students and their support needs showed that the itinerant teachers spent considerable proportions of their time at the schools they visited in withdrawal instruction (87% said they spent six or more hours each week in this mode with the deaf and hard of hearing students, with significantly more time spent with the profoundly deaf students and more time consulting with their class teachers).

In summary, the data presented quite high levels of both class and itinerant teachers’ satisfaction with the model of support being provided (although almost a quarter of the teachers considered that the present placement did not best meet some students’ needs) and successful levels of academic achievement for the majority of students (noting, of course, that many students needed to be withdrawn for considerable periods of time and that 17% had only minimal academic involvement). However, the data on students’ social participation and level of independence reverses this pattern of results, with a majority of students not being seen as completely independent or participating socially in an active manner.

In conclusion, the transition from policy to practice of inclusion among Australian states remains questionable, particularly as there is no clear research evidence regarding the efficacy of the outcomes of stated inclusion policies for the students themselves. In this context, it can be debated which outcomes are of relevance and what the priorities among such outcomes should be. The measures of students’ independence and participation in social and academic activities in schools that are available (Power & Hyde, 2002; Hyde & Power, 2003) are determined from the perspectives of the schools and the teachers and make assumptions about the factors that are considered to be most relevant to student “participation” and achievement. There would still seem to be a need to consider the actual experiences of students and the nature of their engagement within various school settings and curricula that are based on inclusion policies. Otherwise we fall into the situation of being in Powers’ (2002) description, “politically correct” in policy terms, but still not being able to present an effective context for deaf students’ learning and development within broad social, academic and personal and community environments.

Norway

A recent Norwegian study: “Towards a new compulsory education for deaf pupils” was part of the Norwegian Research Council’s “Evaluation of Reform 97” (Ohna, Hjulstad,

Vonen, Grønlie, Hjelmervik, & Hoie, 2003). The project was designed to “evaluate the introduction of the syllabi for deaf pupils”, and at the same time to “evaluate the compulsory education of deaf pupils in a wider perspective”. The main aim of the project was examine the different ways of organising education of deaf students across Norwegian municipalities, with an emphasis on language and modality use, communication interaction and classroom contexts.

In the project, two researchers observed ten classrooms located in different schools across different grade levels, over a single week. Both special schools for deaf students and local municipality schools were included in the sample. Making use of time interval observations, field notes, interviews and video recordings of interactive situations, the intention was to make an explorative description of everyday activities in classrooms where deaf pupils were educated according to §2-6 of the Act of Education. Both qualitative and quantitative analyses were used. The quantitative analyses were based on interval observations of registers of teacher-student and student-student activity during specified time intervals, while the qualitative analyses were based on researcher field notes and video recordings of interactions and language and communication modality use in the classrooms.

In these classes two languages, Norwegian and NSL, were used in different situations for different purposes, as decided by the municipality. Three classes structures are described below as they represented the models presented by the municipalities. The purpose is to illustrate some of the patterns of interaction observed in the classrooms, patterns that created constraints for language use and subsequently for learning.

In Class A, there were 15 students from the sixth and seventh grades. There were two teachers, both with formal competence in NSL. In Class B there were 17 students in a second grade. In this class there were also two teachers, one with formal competence in NSL. In class C there were eight first graders and only one teacher, who had formal competence in NSL.

In Class A, all students worked with their individual work-plan most of the time. At the end of the week the teachers inspected the student’s work, commented on it, and gave the students a new work plan for the next week. This lesson type can be summarised as a “desk work lesson” (Sahlström 1999) or “student focused work lesson” (Bagga-Gupta 2002). The teacher in this class very seldom talked to the whole class in “plenary lessons” (Sahlström 1999) or “teacher guided lessons” (Bagga-Gupta 2002).

The interval observations of the activities of the student following syllabi for deaf in Class A showed that their most frequent activities were:

1. Working individually
1. Getting help from the teacher
3. Listening to the teacher

As for the rest of the class, the most frequent activity for the student following the syllabi for the deaf, is working individually. But when the class was working in groups or taking part in conversations with other students, the student following the syllabi for the deaf was most frequently getting help from the teacher or listening to and watching the teacher. Activities involving interactions with the teacher are two of the three most frequent activities for the student following the syllabi for deaf. When the rest of the class are working

individually or in groups and at the same time are talking to each other informally in speech alone, the student following the syllabi for the deaf typically works individually or is talking with the teacher in sign alone. Very seldom does the student talk with other students. The activity-category “conversation [with other students] during individually work” was rated the least frequent activity observed. There were only one or two registrations of this category during 8-10 hours of observation.

Through their communication and language use in this classroom, the teachers appeared to construct two groups of students: one using Norwegian and one using NSL. When examining the language use in this classroom, the pattern shows a sharp boundary between use of NSL and Norwegian. Observing the languages used in the classroom in terms of their modality, there was clearly a use of either sign alone or speech alone. When the teachers interacted with the student following the syllabi for deaf, they always used sign alone. When the teachers interacted with the hearing students, they always used speech alone. The use of sign and speech simultaneously almost never occurred. One of the teachers explained that if she used sign and speech simultaneously, then she felt “it was not proper sign language”.

Similar to class A, there were two teachers in the second grade class, Class B, but only one teacher with formal competence in NSL. Interval observations of the activities for all students in Class B showed that the three most frequent student activities were:

1. Listening to the teacher
2. Answering questions, participates in discussion
3. Working in groups [with other children]

When the “main” teacher talked to the class, she used speech alone. The second teacher (described as the “sign language teacher”; the one with formal competence in NSL), interpreted simultaneously the other teacher’s and the hearing students’ speech into sign. The sign language teacher also interpreted from sign into speech, when the student following the syllabi for deaf expressed something in sign alone. It is important to note that her intended role in the class was as a teacher, not an interpreter.

Interval period data registrations indicate that in this class, there appeared to be opportunities for the student following the syllabi for deaf to participate in classroom communication. However, through the analysis of the field notes and the video recordings, a revised picture of the interactions in the classroom appeared. In the field notes there were registrations of situations where the student following the syllabi for the deaf and the sign language teacher talked together, independent of what was going on between the class teacher and the rest of the students. The analysis of the video recordings of the plenary lessons showed that the deaf student often sought clarifications from the signing teacher of the other teacher’s communication, to resolve misunderstandings. These clarifications did not disturb the rest of the class, because the deaf student and the sign language teacher did not use voice, interacting in sign alone. In these situations the class teacher and the rest of the class continued independently of what the deaf student and “her” teacher were discussing. In this way the deaf student was often “disengaged” or constrained from interactions with the rest of the class. The analysis of interactions and language and modality use presented a picture of two parallel discourses in the classroom; one involving speech alone and the other sign alone.

In contrast to the two previous classes, Class C, was a first grade class with only one teacher. The three most frequent student activities, both for the class as a whole were:

1. Listening to the teacher
2. Working individually
3. Answering questions, participating in discussion

In this class all students participated in common activities initiated by the teacher. According to the Sahlström (1999) lesson format categorisation, the lesson type varied between plenary lessons and deskwork lessons. In plenary lessons the teacher switched between sign and speech simultaneously and sign alone, when talking to the class as a whole or when interacting with individual students, respectively. When the hearing students used speech alone, the teacher repeated what they said in sign and speech before she answered in sign with speech. In this way, the communication and language use in the class was characterised by a combination of different modalities: sign and speech simultaneously, sign alone and speech alone. For most of the time, the teacher used sign and speech simultaneously. But the teacher and the students (both the deaf student and the hearing students), alternated between using sign alone, sign and speech and speech alone, both in whole-class-conversations, and in their student-student dialogue. Another characteristic of communication in this class was that the teacher sometimes used sign alone when talking to the whole class in plenary lessons, and the teacher expected all students in the class to use sign when responding to her.

Examination of the communication interactions and of language and modality use, the three classes present different opportunities for student participation in the communicative room. In Class A it is only the two teachers and the student following the syllabi for deaf, who used NSL. The hearing students were not expected to use NSL, and very seldom did so. When the teacher in Class A expresses that “it is not proper sign language” when she uses sign and speech simultaneously, she also creates barriers for the hearing students. In this way, the language boundary she creates becomes an interactive barrier. In Class B it is the dividing of communication between auditory and visual modalities that creates the constraints to participation. When the teachers accept that the student following the syllabi for deaf and the “sign language teacher” have “clarifying” private interactions, parallel to the ongoing classroom interactions, they also put something at stake. Instead of making these clarifications a part of the classroom discourse, they lead the deaf student into a parallel discourse independent of what the rest of the class are doing.

In contrast to Classes A and B, there is only one teacher in Class C. In this class the teacher uses different modalities, sign and speech simultaneously, sign alone and speech alone. There are two different teacher strategies that are important. First, the teacher sometimes uses sign alone in plenary lessons when talking to all of the students, not only for the student following syllabi for deaf. In this way, the teacher signifies that the use of NSL is an accepted strategy for interaction in the classroom. Second, when she uses sign and speech simultaneously, she decreases the boundary between the languages. In this form of interaction, the hearing students become less dependent on competence in NSL.

In conclusion, it can be asked if these approaches are consistent with bilingual education as it is formulated in the National curricula for compulsory education. Strictly the

approaches as observed in this study, are not consistent with the objectives of the new curricula. If we take all of the different aspects within the Norwegian school reform into consideration, the picture becomes even more ambiguous. Most teachers and parents, who are involved in education of students following the syllabi for deaf, would agree that it is difficult to learn NSL within a municipality school. Access to NSL depends upon participation in an environment together with others who are using the language in diverse everyday situations. In Norway these aspects were a main reason for the reorganisation of the former state schools, and the establishment of the regional Resource Centres for deaf students.

The study findings show how classroom contexts that were ostensibly designed by municipalities to promote inclusion as a process can elicit exclusionary experiences and communication outcomes for deaf students in schools. The analysis of the interactive patterns and of language use and modality in these three classrooms indicates that deaf students using NSL are exposed to some processes of exclusion from the class community in some of the class structures observed, especially in regard to gaining access to a common communicative classroom.

Comparisons of the two systems

The two education systems are different in that Norway has a national system with specific legislation and a national schools' curriculum. Further, the specific place of deaf students and of Norwegian Sign Language in education is cited in national legislation, policy and curriculum statements. Even the descriptions of students – “students following the syllabi for the deaf”, reflects a focus on the curriculum and not on the student per se. Reportedly, audiological criteria are not used in any “placement” considerations, differing from most Australian policies. The majority of students with hearing loss is identified in this way and either placed in the regional Resource Centre schools or in municipality schools with various structures and supports to respond to their needs for NSL. A minority of deaf and hard of hearing students is placed full time in regular classes with support only available through school and regional sources not specifically for deaf students.

Australia divests most of its education policy, legislation and curriculum responsibility to its states (several of which have populations exceeding that of Norway). There are national curriculum guidelines, but they are not mandatory or elaborate at this stage. Australian Sign Language (Auslan) is incorporated in the National Language Policy (Lo Bianco, 1987) and is reflected in state language policies. However, the separate responsibilities of states for all schools and curricula results in variation in the way in which this plays out in policy and practice. Although all states have what are described as bilingual programs with instruction in Auslan these are small programs for relatively few students. As a consequence of its history, parent and community expectations and, importantly, because of strong state policy interpretations of inclusion as meaning “general”/regular class placement, the great majority of deaf and hard of hearing students are in mainstream schools, with support from itinerant specialist teachers. While states' policies are typically framed around inclusion and describe ways in which schools can accommodate to the diverse needs of learners (“inclusive curriculum”), their descriptions also suggest limitations of the process and the “school for all” concept is not a current objective. Processes of ascertainment and appraisal continue to be used to determine “the needs” of students with a hearing impairment and the recommendations of these processes result in

decisions about levels of student and teacher support, funding and, to some extent, student "placement". Students' aided levels of hearing loss are considered and it is of interest to note that in the Australian study described above, this variable did not produce any significant effects on the academic or social performance of the deaf students observed in regular classes (nor was it considered as a factor in the Norwegian procedures). Various states use the terms, "deaf, Deaf, and hearing-impaired" to describe students in their schools, generically, culturally or audiometrically. While there is no state with a separate or mandatory curriculum for deaf students, most states have available some form of Deaf Studies curricula for schools for both deaf and hearing students. These are directed at the study of Auslan, the Deaf Community, and Deaf history, traditions, events and values.

Norway is a country that has approximately one-third of its 350 students following syllabi for deaf in regular classes on a full time basis and two-thirds in schools or classes for deaf students. The one-third who are educated in regular classes receive short-term clustering arrangements at the Resource Centres for deaf students and their parents to promote competence in NSL and to access social and linguistic networks. There are a lesser number of students with degrees of hearing loss in regular classes who do not fall under the provisions of §2-6 of the Act of Education. The national curriculum, the supplementary curricula for deaf students, emphasises development of parent and teacher competence in NSL, and the use of the Resource Centres to provide additional support to municipality schools. These components evidence the formal transition of this cultural and curriculum model of inclusion from legislation, to policy, and towards practice.

This is in contrast to the Australian situation where the typical experience for a deaf student will be learning full-time in a regular local school, as the only deaf student in that school, receiving some weekly support from an itinerant teacher of the deaf, communicating in auditory-oral modes, effectively competing academically with her hearing peers, but not being as socially accepted. Contact with other deaf students or with deaf communities will usually be minimal and is not normally structured through education. Access to Auslan interpreters for education is limited, but increasing. It is most frequently available in universities (and Australia has a high participation rate of deaf students in higher education), increasingly in secondary schools but rarely available in primary/elementary schools. Findings of the Australian study suggest that this would be effective for many deaf students in secondary and some primary schools to supplement the communication they receive from auditory-oral and print sources in regular classes.

There are also interesting methodological differences between the two studies described in this paper. These differences relate to the studies' designs (quantitative in the Australian study and qualitative and qualitative in the Norwegian), the participants involved (itinerant teachers in the Australian study and teachers and deaf and hearing students in the Norwegian), the variables examined (e.g., student participation levels in the Australian study and patterns of communication and class activity in the Norwegian) and the school/class structures observed (143 regular classes, each with a single teacher in the Australian study and 10 classes in the Norwegian study, with three functioning class structures exemplified).

These differences withstanding, there were some common outcomes from both studies concerning the inclusion of the deaf students involved. In the Norwegian study there was, in two of the class/teacher structures examined, evidence of parallel discourses and forms of communication exclusion for the deaf student from some of the communication

events in the classroom. In the Australian study the authors concluded that, while there was evidence of effective academic integration, there was limited evidence of social participation for the majority of the deaf students involved. In accordance with most current definitions, inclusion could not be strongly claimed as an outcome or process in either country study. There was also a divergence between the intentions of the countries' policies and the practices in the schools.

Discussion and some conclusions

Antia and Levine (2001) suggest that a major difficulty faced by children with a hearing loss is obtaining sufficient access to oral communication and the oral language of the hearing community and that most deaf children will experience difficulty understanding spoken language. They also note that most hearing children have difficulty in becoming sufficiently fluent in a sign language. These authors present the major challenges for inclusion as: language differences, modality differences and language competence. In their US context they observe that, while most hearing students communicate with spoken English, many deaf students have ASL as their primary language and that in a common school this creates barriers to shared communication, socialisation, co-operative learning and the building of relationships. They observe that modality differences occur because many deaf children, particularly those with profound losses, do not readily acquire language through the auditory channel and require access through a visual channel for access to English or ASL. For ASL they note that due to the low incidence nature of deafness, these children (most frequently with hearing parents) often lack access to a community of proficient signers in their experiences at school and out of school. As such, there are few opportunities for hearing and deaf children to share communication through a mutual language or modality, even though they may attend the same classes. It can be noted that the Norwegian and the Australian studies described in this paper present some similar characteristics.

Antia had also suggested in an earlier presentation (1994) that there was a need for specific strategies to engender socialisation and co-operation between hearing and deaf children classrooms through: (1) reducing teacher-child interactions, (2) changing classroom activity to be more child centred and less teacher directed, (3) providing social skills intervention, (4) providing peer-mediated interventions, (5) providing peer orientation and, (6) increasing familiarity through intensive contact (reported in Croyle, 2003). There appear to be features in the operation of both the Norwegian and Australian systems that would benefit from these suggestions. As Kavale and Forness (2000) indicated, "inclusion appears to be not something that simply happens but rather something that requires careful thought and preparation" (p. 287).

On another point, Antia and Levine (2001) also noted that the use of interpreters with young school-age children is not advisable as "language is learned through interaction and exposure. The interpreter can only provide exposure, as the young child cannot be assumed to understand that the interpreter is functioning as the "hands of the teacher" (p. 371). This issue is a problematic one that may, in part, be assisted by the findings of the Norwegian study where the teacher in Class C was able to switch in seemingly discriminating ways between Norwegian and NSL in combinations of auditory and visual modalities to promote class discussion and better direct plenary teaching sessions.

There is evidence in these studies and the recommendations in other studies (e.g., Stinson & Kluwin, 2003; Powers, 2002) that different or, at least more diversified, models of inclusion in practice are needed for deaf students. These models could better reflect the heterogeneity of deaf students who are currently in general education classes, and more comprehensively encompass the needs of students who could benefit psycho-socially, communicatively and culturally from the use of a sign language in regular classes. This is not necessarily to suggest a form of “exclusion”, but a structure of inclusion that respects the retention of certain individual or group characteristics. Some commentators suggest that there is a need for humans to maintain some concepts of difference and that these may strengthen the person’s own sense of identity, distinctiveness or competence (Rosenqvist & Gustavsson, 1993).

Even when inclusion is strongly supported by national or state policy, or even legislation as it appears to be in the countries reported here, there is concern that despite the nature of such legislation and policy proclamations, the observable practices or outcomes in schools can remain substantially unchanged or demonstrate significant delays or difficulties in their implementation. As Sowell (1995) presented, policy issues can become ideological debates that present conflicting visions or the “vision of the anointed” (p. 241) that can prevail over others in determining policy, particularly visions that espouse “full” inclusion on only moral and rights principles. The authors of this paper hope that the two-country comparison presented here contributes further to shared understandings of the interpretations of inclusion and various ways in which it may be best achieved for deaf students. For as Powers (2002) stresses,

“there is an urgent need for teachers to develop a shared language and understanding of what inclusion means at school and at classroom level...beyond vague notions of greater participation in mainstream settings“ (p. 230).

This article commenced with the view that inclusion is a term and process that is culturally, politically, medically, philosophically and historically relative in its interpretations. This would seem to be true in this two-country comparison. However, it is suggested that there is also a personal or individual interpretation of inclusion. It involves the perceived outcomes and benefits of one’s experiences and the degree of acceptance, involvement and the sense of well being that they generate. To discuss inclusion as a term, process or philosophy that relates to groups of individuals with a common characteristic such as deafness may not be effective due to the influence of the diverse range of inter-individual differences in the varied social and cultural circumstances in which deaf people live and learn.

References

- Antia, S. D. (1994). Strategies to develop peer interaction in young hearing-impaired children, *The Volta Review*, 96, 277-290.
- Antia, S. D., & Levine, L. M. (2001). Educating deaf and hearing children together: Confronting challenges of inclusion. In M. J. Guralnick (Ed.), *Early childhood inclusion: Focus on change*. Baltimore MD: Paul H. Brookes Publishing Company.
- Ashman, A., & Elkins, J. (Eds.). (2002). *Educating children with diverse abilities*. Sydney: Prentice Hall.

- Bagga-Gupta, S. (2001). Diskursiva och teknologiska resurser på visuella 'tvåspråkiga' pedagogiska arenor. [Discursive and technological resources at visually 'bilingual' pedagogical arenas.] *Utbildning och Demokrati*, 10, 1, 55-83.
- Bat-Chava, Y. (2000) Diversity of Deaf identities. *American Annals of the Deaf*, 145, 420-427.
- Bat-Chava, Y. (1993) Antecedents of self-esteem in deaf people: A meta-linguistic review. *Rehabilitation Psychology*, 38, 221-234.
- Byrnes, L. J., Sigafos, J., Rickards, F., & Brown, M. (2002). Inclusion of deaf students in government schools in New South Wales, Australia: Development and implementation of policy. *Journal of Deaf Studies and Deaf Education*, 7, 244-257.
- Croyle, C. J. (2003). Inclusion of young children who are deaf and hard of hearing. In B. Bodner-Johnson & M. Sass-Lehrer (Eds.), *The young deaf and hard of hearing child: A family-centered approach to early education*. Washington DC: Gallaudet University Press.
- Dalen, M. (1994). "Så langt det er mulig og faglig forsvarlig -": Integrering av funksjonshemmede i grunnskolen. "As far as it is possible and professionally acceptable": *Integration of disabled students in compulsory school*. Oslo: Universitetsforlaget.
- Flem, A. & Keller, C. (2000). Inclusion in Norway: A study of ideology in practice. *European Journal of Special Needs Education*, Vol. 15, No 2, pp. 188-205.
- Foreman, P. (Ed.). (2001). *Integration and inclusion in action*. (2nd Ed.). Sydney: Harcourt.
- Fortnum, H., Marshall, D. H., Bamford, J. M., & Summerfield, A.Q. (2002). Hearing-impaired children in the UK: Education setting and communication approach. *Deafness and Education International*, 4, 123-141.
- Gregory, S., Bishop, J., & Sheldon, L. (1995). *Deaf young people and their families: developing understanding*. Cambridge: Cambridge University Press.
- Holden-Pitt, L., & Diaz, J. A. (1998). Thirty years of the Annual Survey of Deaf and Hard-of-Hearing Children and Youth: A glance over the decades. *American Annals of the Deaf*, 142, 72-76.
- Hyde, M. B., & Power, D. J. (1991). Teachers' use of simultaneous communication: Effect on signed and spoken components. *American Annals of the Deaf*, 136, 381-387.
- Hyde, M. B., Power, D. J., & Leigh, G. R. (1996). Language of teachers of the deaf to hearing and deaf students under simulated oral and simultaneous conditions. *Journal of the Canadian Association of Educators of the Deaf and Hard of Hearing*, 22, 122-129.
- Hyde, M. B. & Power, D. J. (2004). Educational inclusion of deaf students: An examination of the definitions of inclusion in relation to the findings of a recent Australian study of deaf students in regular classes. *Deafness and Education International*, 6, (2), 82-99.

Education of the deaf in Australia and Norway: A comparative study of inclusion.

- Hyde, M.B. & Power, D.J. (2003). Characteristics of Deaf and Hard of Hearing Students in Australian Regular Schools: Hearing Level Comparisons, *Deafness and Education International*, 5, 133-143.
- Hyde, M.B. & Power, D. J. (2004). The personal and professional characteristics and work of itinerant teachers of the deaf and hard of hearing in Australia, *The Volta Review*, 104 (2).
- Johnston, T. (in press). W(h)ither the deaf community? Population, genetics, and the future of Auslan. *American Annals of the Deaf*.
- Kavale, K. A., & Forness, S. R. (2000). History, rhetoric and reality: Analysis of the inclusion debate. *Remedial and Special Education*, 21, 279-296.
- KUF. (1996). *The national curricula for the compulsory education*. Oslo: The Royal Ministry of Education, Research and Church Affairs.
- KUF. (1998). *The national curricula for the compulsory education*. Oslo: The Royal Ministry of Education, Research and Church Affairs.
- Leigh, I. (1999). Inclusive education and personal development. *Journal of Deaf Studies and Deaf Education*, 4, 236-245.
- Lo Bianco, J. (1987). *National policy on languages*. Canberra: Commonwealth Department of Education.
- Luckner, J. (1999). An examination of two co-teaching classrooms. *American Annals of the Deaf*, 144, 24-34.
- Luckner, J. (2001). Successful students who are deaf in general education settings, *American Annals of the Deaf*, 146, 435-446.
- Mastropieri, M. A., & Scruggs, T. E. (2000), *Inclusive classroom: The strategies for effective instruction*. New York: Prentice Hall.
- Mirenda, P. (1998). Educational inclusion of AAC users. In D.R. Beukelman & P. Mirenda (Eds.), *Augmentative and alternative communication* (2nd Ed). (391-424). Baltimore: Paul H. Brookes.
- Ohna, S.E., Hjulstad, O., Vonen, A.M., Grønlie, S., Hjelmervik, E., Hoie, G. (2003). På vei mot en ny grunnskoleopplæring for dove. [Towards a new compulsory education for deaf students]. Skådalen Publication No 20. Oslo: Skådalen Resource Centre.
- Power, D. J., Hyde, M. B., & Leigh, G. R., (1996). Language of teachers of the deaf to hearing and deaf students under simulated oral and simultaneous conditions. *Journal of the Canadian Association of Educators of the Deaf and Hard of Hearing*, 22, 122-129.
- Power, D. J., & Hyde, M. B. (1997). Multisensory and unisensory approaches to communicating with deaf children. *European Journal of Psychology and Education*, 12, 449-464.
- Power, D. J. & Hyde, M. B. (2003). Itinerant teachers of the deaf and hard of hearing and their students in Australia: Some state comparisons. *International Journal of Development, Disability and Education*, 50, 385-402.

Education of the deaf in Australia and Norway: A comparative study of inclusion.

Powers, S. (1996a). Inclusion is an attitude, not a place: Part 1. *Journal of the British Association of Teachers of the Deaf*, 20, 35-41.

Powers, S. (1996b). Inclusion is an attitude, not a place: Part 2. *Journal of the British Association of Teachers of the Deaf*, 20, 65-69.

Powers, S. (2002). From concepts to practice in deaf education: A United Kingdom perspective on inclusion. *Journal of Deaf Studies and Deaf Education*, 7, 230-243.

Rosenqvist, J. & Gustavsson, A. (1993). *A new school for learning disabled students in Sweden? A contribution to the concept of integration*. Department of Education, Stockholm University, Report No. 3.

Sahlström, F. (1999). *Up the hill backwards: On the interactional constraints and affordances for equity-constitution in the classroom of the Swedish comprehensive school*. (Uppsala Studies in Education 85). Uppsala: Acta Universitatis Upsaliensis.

Skarbrevik, K. J. (2001). Disabilities among Norwegian students found eligible for special education, *International Journal of Disability, Development and Education*, 48, 253-268.

Sowell, T. (1995). *The vision of the anointed: Self-congratulation as a basis for social policy*. New York: Basic Books.

Stainback, S., Stainback, W & Forest, M. (1989). *Educating all students in the mainstream of regular education*. Baltimore MD: Paul H. Brookes.

Stinson, M. S., & Antia, S. D. (1999). Considerations in educating deaf and hard-of-hearing students in inclusive settings. *Journal of Deaf Studies and Deaf Education*, 4, 163-175.

Stinson, M. S., & Antia, S. D. (2001). Considerations in educating deaf and hard of hearing students in inclusive settings. *Journal of Deaf Studies and Deaf Education*, 6, 163-175.

Stinson, M. S., & Kluwin, T. N. (2003). Educational consequences of alternative school placements. In: M. Marschark & P. E. Spencer (Eds.), *The handbook of deaf studies, language and education*. New York: Oxford University Press.

Vislie, L. (1995). Integration policies, school reforms and the organisation of schooling for handicapped pupils in western societies. In: C. Clark, A. Dyson, & A. Millward (Eds.): *Towards inclusive schools?* London: David Fulton Publishers.

Walther-Thomas, C., Bryant, M., & Land, S. (1996). Planning for effective co-teaching: The key to successful inclusion. *Remedial and Special Education*, 17, 255-265.

Wall, S. (2000). Inclusion of infants, toddlers and preschoolers with disabilities. In M. Winzer & K. Mazurek (Eds.), *Special education in the 21st century*. Washington DC: Gallaudet University Press.

Winzer, M. (2000). The inclusion movement: Review and reflections on reform in special education. In M. Winzer & K. Mazurek (Eds.), *Special education in the 21st century*. Washington DC: Gallaudet University Press.

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Author affiliations:

Merv Hyde is Professor of Special Education and Director of the Centre for Applied Studies in Deafness in the Faculty of Education at Griffith University in Queensland, Australia. He was Visiting Professor at Skådalen Kompetansesenter, Slemdal, Oslo, Norway in mid 2003.

Stein-Erik Ohna is Associate Professor of Education at the Stavanger University College, Stavanger, and was a research associate at the Skådalen Kompetansesenter, Slemdal, Oslo, Norway.

Oddvar Hjulstadt is currently a doctoral candidate (Stipendiat) in the Department of Special Needs Education in the Faculty of Education at the University of Oslo, Norway.