It appears to be a rather ordinary class, this sixth grade. The children are gathered around a student teacher; most be on the floor. They are discussing yesterday's field trip. Suddenly, strange grunts are heard coming from a child in a wheelchair. She is making thrashing movements with the upper part of her body. She has something to add to the discussion. The boy sitting closest to her opens a looseleaf binder.(1) She points to specific words as her assistant reads them out one by one. The student teacher repeats the girl's sentence as a more cohesive whole; the discussion continues.

This part of the lesson over, the children go off to different areas of the room to work on an assignment. The girl in the wheelchair is pushed to her desk. She begins, at once, to type.

In the afternoon the children line up for gym class. Another girl begins to cry. A friend offers comfort and notifies the teacher. The rest of the children talk in hushed voices. It is the last day in school for this girl. The following week she is scheduled to have an operation on her hips. The children are attempting to understand what will happen, speculating on the outcome.

In gym class, the teacher explains some rules and points about the game of badminton. All the children try their skills in volleying the shuttlecocks back and forth. The four children in wheelchairs aren't having much success; the teacher tries a series of alternative measures. A successful adaptation is achieved by using sponge balls and rolling them along the floor from one child to the other. There is never a lack of willing partners to play this modified game of badminton with these four children.

The class described is one of sixteen classes in Keith School in LaSalle. The Educational Project at this school

involves the mainstreaming of physically handicapped children. The principal is Miss Diane Brooks, her staff assistant, Sheila Canci; there are nineteen teachers in all this year, including one free flow teacher, a gym teacher, and two French specialists.

The school serves a working class population. The families are mixed with respect to their ethnic origins: about 83 percent of the children are of Canadian anglophone parents, another 15 percent are children of West Indian background, and children from Greek, Italian, Chinese, and Japanese families comprise the remainder. In all 338 children attend the school.

The single-storey building was constructed in 1968. Its plan is open, although it has a few self-contained classrooms. In the first three grades, family grouping is in operation. Several teachers have flexible team-teaching arrangements; other teachers make effective use of learning centres. It is a place where teachers feel comfortable trying new ideas, working in innovative ways.

Although most parents attend the open house in the fall and meet with teachers during evaluation conferences, the Home and School Committee does not have many active supporters. A high proportion, 30 percent, of the families are single parent; even in two-parent homes, many of the mothers work.

The inception of the project: a transition class

In 1978 Karen Hulme was making telephone calls to a number of schools, seeking places for some of the children at the MacKay Centre, a school for the handicapped. A teacher at MacKay for a number of years, she was responsible for integrating non-handicapped children into the special classes at MacKay, but she felt that some of the children at the Centre were ready for a more normal educational program in a regular school setting. She appealed to Diane Brooks and the teachers at Keith to consider taking these children into the school. Pansy Drury, a grade four teacher, and Marco Fraticelli, a grade five teacher, volunteered to teach handicapped children along with their regular students.

In the last months of 1978, one child on crutches joined the grade 4 class. He made such a successful adjustment that he was enrolled as a full-time student at Keith. Then two children in wheelchairs began attending grade 5 on a trial basis for one morning per week, and the teacher planned lessons from which he felt the children in his class and the two handicapped children would benefit. This arrangement proved so successful that the teacher and Karen Hulme began to discuss the possibilities of a fuller mainstreaming program.

Karen presented a plan to the teachers at Keith in the spring of 1979 for establishing a transition class. She outlined the particular problems of all the children being considered for the mainstreaming program. The objectives of the plan were

discussed, as well as the ways in which the program would be implemented. The teachers were encouraged to express their feelings either in writing or through informal discussions about the proposal, and to offer any suggestions. There was a certain amount of trepidation on the part of the staff, but they were all extremely interested in the idea and gave their support. The proposal was also submitted to the Protestant School Board of Greater Montreal and the Ministry of Education.

Several teachers from Keith visited the MacKay Centre to increase their own awareness of the demands of working with these children. A floor hockey game was planned with a group of children from the Centre and another from Keith School. Karen Hulme gave slide presentations. The nurse at Keith School discussed possible problems, helping teachers become aware for instance of the procedures to follow should one of the children have a seizure.

The principal sent a letter home with fourth graders toward the end of the school year asking parents how they would feel about having their child educated in a class with handicapped children. Many parents reacted positively to this plan for the transition class. Ten Keith children were then selected from the list of students whose parents had given approval, and five handicapped children were chosen after careful evaluation by the staff at the MacKay Centre. Their parents were contacted individually, and the idea of the transition class was discussed fully with them.

A wooden ramp was built to enable children in wheelchairs to go down the three steps to the gymnasium. A staff bathroom was altered to accommodate these children. Ramps leading down the steps to the play yard were installed by the Board. The Home and School Committee paid for the materials for a ramp to the lunch room, and the grandfather of one of the students constructed it.

It was arranged for the handicapped students to attend Keith School for three full days and two half days per week, the rest of the time being spent at the MacKay Centre making use of the rehabilitation services: physiotherapy, communication skills, and swimming. The MacKay Centre was to be responsible for any special equipment as well as educational supplies. A bus from the Protestant School Board of Greater Montreal was provided initially for the students' transportation.

The original proposal had suggested that this group of five students from MacKay would remain at Keith for a three-month trial period, whereupon other students from the Centre might then be selected for this mainstreaming program. Because of the successful adjustment and integration of the students chosen initially, their period was extended for the remainder of the school year.

Integration: the handicapped children arrive

In the first weeks of the school year an assembly was held for all the Keith students, at which the principal announced that handicapped children would be coming to Keith. The grade 5 teacher explained the purpose of the ramps and suggested ways in which Keith students might be able to help the children in wheelchairs. Parents not directly involved in the transition class were informed of the mainstreaming project during a "Meet-the-Teacher" night that fall. The project had also been outlined to the Keith School Committee, and the members' comments sought. The parents of the handicapped children came to visit the school one evening before the term began, and then were asked back to observe their children in the transition class. They were encouraged to discuss any concerns they had.

Then, on September 10, 1979, the five children arrived in grade 5. The-free flow teacher assisted in administering Stanford Diagnostic tests, which showed that in many academic areas, such as reading, the children were well behind their expected level of performance; several had spent a considerable amount of time in hospital and had missed a lot of schooling. Appropriate educational programs were developed for each child. A team teacher provided considerable support, assuming control of both classes when the teacher had to leave to tend to an emergency. Additional work on specific skills to meet individual needs was provided by numerous people, including teachers, the staff assistant, and a grade 6 student who volunteered to feed one of the quadriplegic children at lunch time.

The grade 5 teacher organized a special reading group for four of the five students. He found that these students were extremely diligent in their work; had been selected because of their desire to be integrated into the mainstream. In spite of this strong motivation, however, they still had a considerable adjustment to make. At the MacKay Centre they had become accustomed to low student-teacher ratios, permissive disciplinary regulations, and individual attention. Peer pressure now encouraged the children to modify their behaviour, to develop more patience and understanding, and to become more adjusted socially. They gained increasing confidence as they became more able to handle themselves in this educational environment with the rest of the children.

The classroom teacher also became aware of ways in which his ten regular children were changing. These children were extremely supportive of the five students, helping them with academic matters, organizing their activities and work, and assisting them to adapt to the school environment. In giving this help to the handicapped children, moreover, the behaviour and work habits of the ten regular students improved noticeably. He feels that these ten children became "completely sensitized" to the handicapped in ways in which most people will never be. In addition, the two groups of children became very close, very

attached to each other. Several special friendships have developed.

Changes in the ethos of the school

The presence of these five children seemed to alter the behaviour of all the students in the school. The children no longer seemed as impelled to run in the halls, aware perhaps of the difficulty they might cause should they upset one of the students in wheelchairs. Any child within the proximity of a handicapped child was always willing to assist in any possible way. At first, several of the younger children had the idea that the handicap, as well as the wheelchair, was temporary; that these children would shed their problems as readily as a child with a broken arm gets rid of its cast. Their understanding of the problems of the handicapped increased tremendously through discussions in their own classrooms. Many teachers have shown films on handicapped people, available through the National Film Board.

Among students and staff alike, the handicapped children have generated an attitude of compassion. For the most part, there is an unspoken, positive feeling throughout the school. It seems as if the inclusion of this group of children has brought out the best in the entire Keith community. Many barriers have been broken. The handicapped children have been very open with respect to how they feel about themselves, and how they wish to be treated. One boy, being quite explicit about his feelings, felt the handicapped children should be treated the same way as non-handicapped children because they are the same except for their ability to walk. "We are human, too," he said. "Yes, we need help, but everybody does." A girl described the MacKay Centre as having a "hospitalized environment": at the Centre, when all around her were in wheelchairs or on crutches, her own state of physical disability seemed to be emphasized. At Keith School, in contrast, she was able to compete on fairly equal terms with all the rest of the children. No one prevented her from attempting new feats; her own handicap no longer seemed overwhelming. She, like the rest of these children, all seemed to sense an enormous accomplishment in learning how to cope in a regular school setting.

The handicapped children also thought that the academic work was more demanding at Keith. Several of these children depend upon typewriters for their written work; others have been given special instruction in tasks such as handwriting. All the children, handicapped or not, were given assignments to complete within a set time. Academically, they have done very well. The Stanford Achievement tests, with the criteria for evaluation the same as for the non-handicapped except in the area of fine-motor coordination, indicated that they have made extraordinary gains. A few children have developed particular areas of strength, and have been involved in a program for the gifted.

Looking ahead

In 1980-1981, eleven children from MacKay Centre were enrolled in four different classes at Keith School. The school was hopeful that twelve children would be mainstreamed in the 1981-1982 school year, though of course the number of children that come from MacKay depends upon the decisions of the teachers at the Centre, who only recommend children for the mainstreaming program that they feel will make a successful transition. The parents of the handicapped children must also be in favour of this change. The final decision to have this project continue rests each year with the Board.

Keith School remains willing and able.

Karen Hulme attributes the enormous success of the mainstreaming project to Diane Brooks and the staff at Keith School. Without the special support they have all received, the handicapped children could not have made such a successful transition. Similarly, the principal values the role Karen Hulme has played in the project. As the liaison person with MacKay Centre, she comes to the school whenever she is called no matter how small the problem. She has also contacted countless sources for financial donations. Her support and encouragement have been greatly appreciated by everyone at Keith School.

The principal and teachers involved are convinced that the integration project is a complete success; many of the difficulties that Diane Brooks anticipated have failed to materialize. No child from the MacKay Centre has failed to make a satisfactory adjustment. While everyone was initially very cautious, they are now very comfortable with the entire situation. Every teacher in the school has expressed a willingness to work with any handicapped child that the MacKay Centre feels is ready to make the transition. Problems are handled as they arise. The confidence of the entire staff in working with these children has increased tremendously.

There has been a shortage of financial support. Equipment that has broken - for instance the communicator on one of the children's wheelchairs - has often gone unrepaired. Teachers involved with the handicapped children have become very inventive and adaptive in meeting some special needs. Nevertheless an aide, part or full time, would help considerably, and Karen Hulme has made a request to the Board (as of 1981).

As the children do not live in the Keith School area and must travel long distances, the biggest problem was transportation. At first, one bus was provided, but the bus was often late. After considerable effort, two station wagons were also allocated for the children with less serious handicaps.

Meeting the criteria

Does the inclusion of physically handicapped children in Keith School constitute an Educational Project? In the initial conversations with Diane Brooks, it was apparent that she had not, to that date, considered it in such formal terms. Mainstreaming physically handicapped children was seen as an effort, embraced initially by only a few teachers, to provide an education in a regular school setting to children normally denied this access.

In terms of product dimensions, an Educational Project normally cuts across such traditional divisions as subject matter disciplines and grade levels. At present the mainstreaming effort directly involves only four classes at Keith School. If current proposals came about, more classes will have included physically handicapped children in the following school year. Every teacher in the school had expressed a willingness to work with these children. Yet one must conclude that, at present, although the mainstreamed children have certainly had some effect on the whole school, the involvement of the whole school could easily be increased.

Includes a plan

Another product common to all Educational Projects is a plan designating an educational area for development. Keith's mainstreaming effort has had, as a central element, a well-defined plan. Initially, discussions of the idea were verbal in nature, but soon they were formalized in the Proposal for a Transition Class in April, 1979. The plan has continually evolved to meet the needs of the children and the staff.

Initiated from within

The mainstreaming effort at Keith does not fully meet the process criterion that the project be initiated from within. Karen Hulme, from the MacKay Centre, proposed the idea to the Keith staff. She has been present for purposes of consultation at every stage. There is, however, a considerable effort on the part of the entire school population to assure that the handicapped children are successfully integrated.

Reflecting consensus

An Educational Project should involve elements of the community in the process of consultation and participation. The project at Keith does not fully meet this criterion: the handicapped children, with one exception, live beyond the boundaries of Keith School, and the consultation with parents in the school community has been limited to explaining the plan and seeking their approval. Their direct participation in the actual mainstreaming effort has not been required.

Facilitating the development of participants

An Educational Project must serve to support the

development of those involved. The handicapped children, the regular Keith children, and the teachers have all been very positively affected by the mainstreaming effort.

Evolving through adaptation

An Educational Project adapts to the changing needs of the school and the people it serves. Throughout the course of the mainstreaming effort, the processes of adaptation have been taken into consideration. Initially three handicapped children were integrated into two classes for part of a morning, once a week. At present, the integration involves ten children and four classes. There is every indication that this involvement will increase.

Known about and understood

A quality of transparence should be a feature of an Educational Project. The visual signs of the mainstreaming effort at Keith are ever present. These include the ramps, the larger desks, many with typewriters, and, of course, the children in wheelchairs. The effect this project has had on students and teachers alike becomes evident as soon as one engages in conversation with any of the people in the school. Furthermore, the effort at Keith has become known throughout the immediate school community and beyond; visitors, other administrators and teachers, frequently come to the school to see the plan in operation. Many educators have come to consider the integration of the physically handicapped at Keith School to be a model project.

To summarize, the project at Keith School has a limited interaction with its surrounding community. At present, not all teachers are directly involved. On these two counts the mainstreaming effort does not meet the criteria for an Educational Project. Yet one must consider the commitment that is evident on the part of the school population, the developing nature of the involvement with the handicapped children, and the changes in attitude that have gradually pervaded the entire school environment. The strength of these dimensions lends credence in designating the Keith effort an Educational Project.

NOTE

1. In the binder is a Bliss board, a symbolic system for communication used by people who are unable to speak. The system consists of 500 colour elements. Variations in position and number permit an extensive language production. The Bliss board is a grid of these symbols, as well as the words they represent. The user points to the symbol and the translator reads the word so all may understand.