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Inclusion at the Elementary School Level: The Effects on Nondisabled Students

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A Thesis

in

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of

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ABSTRACT

Inclusion at the Elementary School Level: The Effects on Nondisabled Students

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This thesis set out to determine if nondisabled children, who participate in inclusive educational settings, are affected by the presence of special needs children in the classroom. This study examined this issue by administering a Likert-type questionnaire to 33 elementary school teachers and 61 Grade 6 students. The participants were also asked for comments in order to expand on their opinions. It was found that, overall, inclusive settings have a positive effect on nondisabled students. However, negative effects were reported in terms of academic progress, and teacher time and attention. The findings suggest that the current policies regulating inclusive classrooms are not sufficient. Better regulations in terms of class size, number of children with disabilities, type of disabilities present, and amount of resource support are needed. Limitations of this study and questions for further research are also discussed.

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INTRODUCTION

A wide range of educational settings is available to both special needs and nondisabled children in today's schools. Inclusive schools educate children of all abilities and disabilities within the same classroom. The implementation of this type of setting has been a controversial issue for many years. When considering it's potential advantages and disadvantages the wellbeing of *all* children should be considered. Nondisabled children represent the majority of students in inclusive schools. Although the requirements of special needs children should not be overlooked, this fact points to the need to consider nondisabled students when issues of inclusion arise. In their book, Stainback and Stainback (1989) reported 22 concerns of inclusion. Only one of these concerns referred to the needs of nondisabled children. Research that concentrates on the effects of inclusion on nondisabled children is limited (Odem, Deklyen & Jenkins, 1984; Staub & Peck, 1995) This fact motivated the focus of this thesis.

Within the literature that does exist five areas have been identified that examine the effects of inclusion on nondisabled students. First, participating in an inclusive educational setting may effect the attitudes of nondisabled children towards individuals with special needs (Downing, 1996; Esposito & Peach, 1983; Handlers & Austin, 1980; Logan, Diaz, Piperno, Rankin, MacFatrland & Bargamian, 1994; McHale & Simeonsson, 1985; O'Neil, 1984; Shipley, 1995; Staub & Peck, 1995; Towfighty-Hooshnyar & Zingle, 1984). Second, inclusive classrooms may have an effect on the self-concept of nondisabled children (Bear, Clever & Proctor, 1991; Cutbirth & Benge, 1997). Third, inclusion may

have an impact on nondisabled students' curricular and academic outcomes (Block & Zeman, 1996; Cutbirth & Benge, 1997; Odem, Deklyen & Jenkins, 1984; Rankin & Beuter, 1985; Shipley, 1995; Staub & Peck, 1995). Fourth, the presence of special needs students within the regular classroom may influence the amount of teacher time and attention given to nondisabled students (Cutbirth & Benge, 1997; Staub & Peck, 1995; Willis, 1994). Finally, research has explored the possibility that nondisabled students may learn undesirable behaviors from the special needs students (Odom et al., 1984; Staub & Peck, 1995). Finding the positive effects of inclusion encourages proponents of inclusion. The discovery of benefits could encourage policymakers to continue to fight for inclusion as an appropriate educational setting for both special needs and nondisabled children. The discovery of downfalls leads to the development and application of strategies and interventions that can help to overturn these potential downfalls.

This study will set out to examine the effects of inclusion on nondisabled children. It is hypothesized that inclusive educational settings have a positive effect on nondisabled students. Specifically:

1. Nondisabled students in inclusive educational settings hold positive attitudes towards individuals with special needs.
2. Nondisabled students in inclusive educational settings have high evaluations of self-concept.
3. Nondisabled students in inclusive educational settings do not suffer academically.
4. Nondisabled students in inclusive educational settings do not lose out on

teacher time and attention.

5. Nondisabled students in inclusive educational settings do not learn undesirable behaviors from the special needs students.

LITERATURE REVIEW

A wide range of abilities is evident in children's educational settings. Many children have been coined "special needs" because they show a certain degree of impairment in cognitive functioning and/or adaptive behavior. Children diagnosed with attention deficit hyperactivity disorder (ADHD), learning disabilities (LD), mild mental retardation, physical disabilities, and autism are but a few examples of individuals who are considered to have special needs. Many children do not receive a specific diagnosis, but are also considered to have special needs because they require supplementary supervision or an adapted curriculum.

These children have been educated in a number of different settings. Special education in Québec has undergone many reforms over the years. During the 1940's some institutions were set up to accommodate students then labeled "exceptional". These institutions were predominantly run by religious orders, parent's associations and benevolent organizations. Just prior to the 1960's a few school boards began to organize special classes for mentally or physically handicapped children. Important educational reforms began to take place in Québec during the early 1960's. These reforms set out to change the character and structure of both elementary and secondary education. They were designed to modernize the system and improve accessibility to children, so that secondary education would become more available to children, despite their socioeconomic background and geographical location.

The most frequently used approach to the organization of students with special needs, during the 1960's and 1970's, was the formation of special education classes. These classes were mostly located within the regular public school. In 1976 the Comité Provincial de l'Enfance Inadaptée (COPEX) issued a report that revealed many gaps in the services available for special needs children. This report was also very critical of the tendency towards the segregation of such children. Almost as a direct result of the COPEX report the Ministère d'Éducation du Québec (MEQ) announced a completely new policy concerning special education in 1979. The aim of the new policy was to assure that all special needs children would have access to education that was appropriate to their needs, within the regular school system, in their community. The public sector, therefore, became required by law to accept the responsibility of educating *all* Québec children within the mainstream (Csapo & Goguen, 1980).

Today many of Québec's schools are inclusive educational settings. An inclusive school educates all students in the mainstream, including those with learning and physical disabilities, at-risk, or gifted (Stainback & Stainback, 1992). This means that both special needs and nondisabled children attend the same classroom and learn side by side. A growing number of studies report the effects of this type of environment on special needs children on both the academic and social scales (Barry, 1994; Bogden, 1983; Fuchs & Fuchs, 1994; Madden & Slavin, 1983; Shanker, 1994; Zigmond & Baker, 1996). It is obvious that the presence of these children undoubtedly changes the structure of the regular

classroom. Yet, less attention has been given to the effects of such a setting on nondisabled students (Odom, Deklyen & Jenkins, 1984; Staub & Peck, 1995).

Attitudes

Day to day contact with peers who display a wide variety of special needs appears to have a significant effect on the growth in social cognition of nondisabled students. Many report that mixed group interaction between special needs and nondisabled children fosters understanding, appreciation, and acceptance of differences (Leister, Koonce & Nisbet, 1993; Lovette, 1996; NCERI, 1996; Staub & Peck, 1995; Winzer, 1987). Students in Grades 7 to 9 at a middle-school in Minnesota reported that one of the most important things that they learned in their inclusive regular education class was acceptance and recognition of differences (York, Vandercook, MacDonald, Heise-Neff & Caughey, 1992). Davern and Schnorr (1991) stated that when special needs students are separated from their nondisabled peers powerful lessons are taught. Segregation teaches young children that individuals with special needs are different and scary so they need to be separated. Inclusive classrooms, on the other hand, represent the type of society that children will be exposed to as adults (O'Neil, 1995). This setting prepares students for the future, through daily life experiences, by teaching them to accept and welcome others despite their differences. In one study, nondisabled high school students reported that as a result of their experience in an inclusive educational setting they felt more at ease around individuals who appear different (Staub & Peck). This also appears to be true at younger ages. Widerstrom (1982) found that children who attended

an inclusive pre-school were more accepting of special needs playmates through elementary school. Children in inclusive schools were given the opportunity to see how individuals with special needs were more like them because they share a common identity as members of the same class. Nondisabled students in these environments therefore learn not to become overwhelmed and anxious when they encounter individuals with special needs (Willis, 1994).

O'Neil conducted several interviews and administered questionnaires in order to assess an inclusive program at Portage View Elementary School in Ontario. The staff at this school reported that they felt that nondisabled children learned how to assist and respect others as a result of their inclusive philosophy (1984). Observations made by the research team also revealed that nondisabled children became more tolerant, understanding, and accepting of their special needs peers as they interacted. Mixed groups were seen interacting in class, talking in the halls, and playing together in the schoolyard. Other schools have also reported similar benefits. The inclusion of one little girl with multiple physical disabilities and a moderate intellectual disability taught her Grade 1 classmates powerful lessons in a school in Georgia. Observations and interviews of the students revealed that the nondisabled children became aware that their special needs peer was teaching them important lessons. They learned that all people are different, that everyone has distinct strengths and weaknesses, and that everybody needs a helping hand from time to time (Logan, Diaz, Piperno, Rankin, MacFarland & Bargmian, 1994). Teachers also reported that a major benefit to the inclusion of special needs students in the regular classroom is that

it allows nondisabled children to learn to appreciate differences and to be sensitive to those who are different. Downing (1996) investigated the process of including three children with special needs into a rural public school over an 8 month period. Through several interviews with many teachers, it was found that the percentage of teachers who believed nondisabled children benefited socially from inclusion increased from 47 % before the special needs children were included to 82 % after the 8 month period. This was the most frequently reported benefit of inclusion. Parents of nondisabled children also reported that their children benefit socially from participating in an inclusive educational setting. After conducting several interviews Shipley (1995) stated that many parents feel that their children learned to respect and accept others for who they are, regardless of their limitations. Stainback and Stainback (1988) stated that simply having a special needs student present in the classroom fosters respect and understanding of individual differences. Inclusive classrooms, therefore, promote tolerance of individuals who are exceptional.

Several studies report that many nondisabled children experience a change in their attitude towards individuals with special needs after being exposed to these individuals on a regular basis (Esposito & Peach, 1983; Handlers & Austin, 1980; McHale & Simeonsson, 1985; Nabuzoka & Ronning, 1997; Thios & Foster, 1991). Attitudes are formed as a function of experience. Increasing contact between special needs and nondisabled individuals can thus lead to improved attitudes (Kisabeth & Richardson, 1985). This change in attitude can help nondisabled children grow and develop into responsible and caring

human beings as they mature into adulthood (Trepanier-Street & Romatowski, 1996).

Esposito and Peach (1983) exposed nondisabled preschool children to regular weekly contacts with special needs peers over an 8 month period. They found that the nondisabled students' attitudes became significantly more favorable after the 8 month period as revealed by the Primary Student Survey of Handicapped Peers. These researchers concluded that the opportunity for contact with special needs peers enables nondisabled children to begin to form early, realistic perceptions and attitudes about people with special needs. On the other hand, McHale and Simeonsson (1985) stated that some researchers have reported that exposure to special needs children is related to negative attitudes in nondisabled children. They therefore exposed nondisabled children in Grades 2 and 3 to five play sessions with autistic children during one week. These children were questioned individually both prior to and following the play sessions in order to assess their attitudes towards individuals with special needs. Specifically, these children were questioned about their willingness to be close to autistic children. They were then asked to rate the characteristics of autistic children according to adjectives presented by the researchers. Finally, the children were asked about their understanding of autism. Contrary to previous reports it was found that the children's ratings were predominantly positive both before and after the play sessions. Therefore, no significant change in attitude was found. Playing with autistic students did not lead to the formation of negative attitudes towards special needs children. An important finding was that these children's

understanding of autism increased over the play sessions. Understanding special needs may play a role in the kind of attitude displayed by nondisabled children. Handlers and Austin investigated this variable in 1980. These researchers recruited high school volunteers to participate in a training program that aimed at teaching these students to become more knowledgeable about individuals with special needs and their conditions. These students took part in five activities that were designed to help them become more aware, informed, empathetic, sensitive, and accepting of individuals with special needs. These activities included a discussion about special needs and the conditions many people face, a research report on a specific disability, viewing a film about a special needs child, a "handicap simulation" experience, and a personal interview. At the end of the activities the participants evaluated their own attitude change. It was found that 82 % of the students felt that their attitudes changed to become more positive and accepting while 62 % thought that direct contact with individuals with special needs was the most effective method for improving attitudes. This study concluded that exposure to special needs peers seems to have an impact on the attitudes of nondisabled children. Inclusive classrooms provide this opportunity for exposure.

The degree of exposure to special needs children, experienced by nondisabled students, may influence the extent to which attitudes can be changed. Voeltz (1980) looked at the attitudes of nondisabled children in three contact groups at an elementary school in Hawaii. A no-contact group where no special needs children were present, a low-contact group that had special needs

students enrolled for one semester, and a high-contact group that had enrolled special needs students for over a year. An attitude survey was administered to children in Grades 2 through 6 in each of the contact groups. These surveys revealed that the children with the most accepting attitudes towards special needs children were those in the high contact group. Contact was found to be an important variable associated with accepting responses and tolerant attitudes. Towfighy-Hooshyar and Zingle (1984) formed similar conclusions based on their research. The attitudes of Grades 2, 4, and 6 children in high and low contact groups were compared through the use of a Peer Attitude Questionnaire that was administered orally to each student. It was found that the children in the high contact groups showed more casual-contact interaction with special needs students and that peer-acceptance increased with contact. The degree of contact with special needs students therefore influenced the attitudes of the children. These studies show that inclusive classrooms, that provide the opportunity for socialization among special needs and nondisabled students, encourage the development of positive and accepting attitudes towards individuals with special needs.

Several investigators argue that it takes more than exposure or mere contact to encourage the socialization, among special needs and nondisabled children, which can foster these positive attitudes. Peck, Palyo, Bettencourt, Cooke, and Apolloni (1988) observed the interaction of preschool children in a partially integrated school. They found that the special needs children were not included in the majority of the social activities that took place among the

nondisabled students. Parents and teachers also reported that they only "sometimes" observed interactions between special needs and nondisabled preschool children (Blacher & Turnbul, 1982). Therefore, it seems that in order for nondisabled children to benefit socially from an inclusive educational setting, specific interventions need to be adapted that will encourage interaction among all of the children. Research conducted by Esposito and Reed (1986) looked at this possibility. They assessed the attitudes of pre-school children in three different settings. These three groups included a structured-contact group, an unstructured-contact group, and a no contact group. It was found that the children in both the structured-contact and the unstructured-contact groups had significantly more favorable attitudes towards their special needs peers in comparison to the no contact group. No significant differences were found between the structured and unstructured contact groups. Contact itself appeared to be the variable that most significantly influenced the students' attitudes. These studies appear to lead to the conclusion that any kind of exposure to special needs students allows for the formation of more favorable attitudes towards individuals with special needs. Nondisabled students are therefore given the opportunity for growth in social cognition when they are members of inclusive educational settings.

Self-Concept

Interactions between special needs and nondisabled students take place in many inclusive schools. In some situations, nondisabled students take pride in helping and assisting their special needs peers (Logan et al., 1994; O'Neil,

1984). This can take place during class time, through a buddy program, in the hall at recess, or outside when they play. Helping a student with special needs can often lead a nondisabled student to experience an increase in self-esteem because they feel good about themselves for having helped a classmate who needed extra assistance (Staub & Peck, 1995).

Leon Festinger's social comparison theory argues that it is natural to evaluate our opinions and abilities by comparing ourselves to others (Myers, 1993). Bear, Clever, and Proctor (1991) state that it follows from this theory that the self-evaluations of nondisabled students are going to be enhanced when they are placed in an inclusive classroom with less abled peers. In their study they asked third graders in both inclusive and segregated classrooms to evaluate their scholastic competence, social acceptance, athletic competence, physical appearance, and behavioral competence. Consistent with social comparison theory, nondisabled boys in inclusive classrooms, who compare themselves to less abled peers, scored higher on measures of global self-worth than did nondisabled boys in segregated classrooms who compare themselves to a higher standard. This study leads to the conclusion that nondisabled students in inclusive educational settings can benefit from a boost in their self-evaluations as a result of their placement in such a setting.

Not all studies report these same findings on the impact of inclusion on students' self-concept. Cutbirth and Benge (1997) examined the perceptions of both special needs and nondisabled students in inclusive classrooms. They asked 40 students to rank a list of statements so that they lay on a continuum

from most like to most unlike their own perception of inclusion. It was found that 82 % of the students had a negative perception of their membership in an inclusive class. This attitude was consistent in the area of self-concept. These students did not feel that they benefited from an enhanced self-perception because they were members of an inclusive classroom. Whether or not nondisabled students in inclusive settings benefit from heightened self-concept appears to remain a question. Inconsistencies in the literature in this area appear to warrant further research.

Curricular and Academic Progress

One of the most frequently reported concerns for nondisabled students in inclusive settings pertains to these students' academic outcomes. This concern stems from the fact that nondisabled students may suffer academically when such a wide range of abilities is present in the same classroom. Through several interviews, Shipley (1995) discovered that this is a worry among both parents and teachers. Parents reported that they feel that the requirements of special needs students often supersede the rights of the nondisabled students. They feel that inclusion is detrimental to meeting the academic needs of their children. Gifted students easily become bored because the entire class moves at a slow pace in order to benefit the special needs children. Average students receive a watered down curriculum, and may not benefit from these modified activities. Nondisabled students also become easily frustrated when they see that others may be doing less work, but receiving better or equal grades. Teachers reported that much time is spent adapting the content for special needs children, which

leaves little time to prepare other activities. Thus, nondisabled students end up receiving the watered down version of the curriculum and suffer academically. Students also expressed concern about the curriculum that they receive. The majority of high school students at a rural district school reported that they felt that their curriculum suffered due to the inclusive philosophy at their school (Cutbirth & Benge, 1997).

Not all research supports the conclusions found in the above mentioned studies. Odom et al. (1984) reviewed several studies and uncovered contrary conclusions. These studies revealed that children in inclusive educational settings and children in segregated settings can make comparable academic progress as measured by tests such as the Standford-Binet, the Student Progress Record, and the Wide Range Achievement Test. In their own research, they compared the academic abilities of nondisabled preschoolers in an inclusive school to a matched group of students in a noninclusive school. No differences between the groups were found in the scores on the Standford-Binet, the Preschool Language Scale, and the California Preschool Scale of Social Competence. This study leads to the conclusion that nondisabled children in an inclusive classroom can make as significant gains as children in a noninclusive setting.

The sample of special education teachers, regular teachers and nonteachers in Pedhazur Schmelkin's study reported similar opinions (1981). The results of this study, found through the use of the Mainstreaming Opinionnaire, suggested that these individuals believe that inclusion will not have

a negative effect on the academic achievement of nondisabled students. Regular and special educators in New York and Massachusetts were given a questionnaire that asked, in part, about their reaction to the inclusion of special needs children into regular classrooms. It was found that 91% of special educators and 68% of regular teachers believed that nondisabled students are not educationally harmed by inclusion (Knoff, 1985).

The Legislative Office of Education Oversight (1995) reported similar conclusions. First, they stated that achievement gains made by nondisabled students in inclusive schools are equal to or greater than the gains made by students in noninclusive classrooms. Second, they found no negative impact on the achievement test scores of nondisabled students after the inclusion of special needs children into their classroom. Finally, their report stated that administrators at several schools believe that the instruction given to nondisabled students does not become diluted or less stringent when special needs children are present. Staub and Peck (1995) agree with these conclusions based on their review of the literature. They stated that a limited amount of research is available in this area. However, the quasi-experimental studies that are reported revealed that there are no differences in the academic progress of nondisabled students in inclusive classrooms compared to matched children in segregated classrooms. They also reported that no significant differences have been found on standardized measures of cognitive, language, and social development. In fact, they believe that nondisabled children benefit academically from inclusive settings because they learn to show concern for others. Therefore, their curriculum is enhanced.

Several studies confirm that these conclusions are consistent across subjects. Block and Zeman (1996) and Rarick and Beuter (1985) both concluded that special needs children can be successfully included in physical education classes without negatively affecting the progress of the nondisabled students.

Although Staub and Peck (1995) reported that the literature consistently indicates that nondisabled students do not suffer academically when placed in an inclusive setting, others do not appear to agree with these conclusions. Further research in this area should help to clarify this situation.

Teacher Time and Attention

Special needs students often require extra attention and one-on-one interaction in order to progress academically. Many of these children also require added attention in order to control their behavioral difficulties. Nondisabled students in inclusive classrooms may therefore suffer because their teacher spends most of his/her time with the special needs children (Lovette, 1996). A sixth grade teacher in Iowa reported that this is the case in her classroom. She explained that the nondisabled children receive less of her attention because the special needs students take up most of her time (Willis, 1994). Students at a rural school also declared that they do not benefit from teacher interaction due to the presence of special needs students in their classroom (Cutbirth & Benge, 1997). Throughout the interviews reported by Shipley (1995) both parents and teachers mentioned that they believe that classroom teachers are inadequately prepared and trained to teach in an inclusive class. Teachers therefore have a hard time allocating their attention among all of the students. Staub and Peck (1995)

disagree with this perspective. They stated that a study conducted by Hollowood (1995) found that the presence of special needs children had no effect on the levels of allocated or engaged time. It was found that time lost to interruptions of instruction was not significantly different in inclusive and noninclusive classrooms. In this study teachers, parents, and students agreed that nondisabled students did not miss out on valuable educational experiences. In fact, nondisabled children may benefit from instruction that is more individualized because inclusive classrooms often contain teacher or integration aides that assist both special needs and nondisabled students (Willis, 1994). Carlson, Renshaw and Andrews (1981) agree with these conclusions. Their sample of teachers reported that they only spend a little more time with special needs compared to nondisabled children. However, this sample of teachers worked in classrooms with appropriate support. Teachers in schools that do not have sufficient support systems in place may dispute this view.

Very little research that focuses specifically on the issue of teacher time is found in the literature (Carlson et al., 1981). What research is done is inconsistent. Perhaps the differences in methodology used by the researchers in the above mentioned studies could account for these inconsistencies. More controlled experimental studies may help to clarify these questions.

Learning Undesirable Behaviors

When students of varying abilities and disabilities are placed in the same classroom it is evident that a wide range of behaviors will be seen. Inclusive classrooms may contain children with behavioral disorders, ADHD, conduct

disorders, and others. Along with these disorders come a variety of behaviors that are deemed to be inappropriate in the classroom. These behaviors could include fighting, lying, destroying property, calling out, and disturbing the class in other ways (Wicks-Nelson & Israel, 1991). It has been argued that the higher incidence of these types of behaviors in inclusive settings could influence the nondisabled students to act in a similar manner. Special needs students may therefore act as poor role models for the nondisabled students. Based on their research, Odom et al. (1984) reported that the presence of special needs children in an inclusive preschool diminished the complexity of the environment and provided inappropriate models. They also stated that this setting provided nondisabled students with a linguistically impoverished environment. Staub and Peck (1995) disagree with these conclusions. They stated that a number of observations and interviews with both parents and teachers showed that nondisabled students rarely copy the inappropriate behavior displayed by special needs children. In fact, the reverse of this situation is most likely to be true. Nondisabled students act as good role models for the special needs children, giving them the opportunity to develop more appropriate behavior (O'Neil, 1984).

Methodological Limitations and Recommendations for Further Research

Research studies conducted in this field appear to agree that many nondisabled students experience a growth in social cognition after participating in inclusive classrooms. This finding is consistent at both the elementary and high school levels (Logan et al., 1994; Staub & Peck, 1995). Parents, teachers, and

students all reported this same benefit (Downing, 1996; O'Neil, 1984; Shipley, 1995).

The majority of these studies used interviews or questionnaires in order to investigate this issue and come up with conclusions. Several limitations inherent in the use of these methodologies bring into question the strength of the conclusions drawn by these studies. It is possible that some items that appear on a questionnaire are unclear to the participant. This problem may lead to incorrect responses and false conclusions. Also, questionnaires cannot probe deeply into the opinions and feelings of the respondents. Questionnaires may indicate that parents, teachers, and students feel that there are social benefits to inclusion, but they may not reveal the apprehension that these individuals have towards this issue unless it is specifically asked. Although interviews can often correct for this problem by allowing the interviewer to probe into the feelings of a participant, interviews present themselves with their own set of problems. The interview situation is often difficult to standardize. This can lead the interviewer to knowingly or unknowingly influence the respondents' answers. Due to the fact that the interview is most often performed in person, this methodology cannot provide the participant with anonymity (Gall, Borg & Gall, 1996). In this situation investigators must be sure that the answers they receive are accurate and not attempts by the participant to present themselves in a favorable manner (Shaffer, 1994). This occurrence can be especially true when investigating a controversial issue such as inclusion.

The studies reviewed also appear to agree that nondisabled students can develop more favorable attitudes towards the disabled after having interacted with these individuals. Inclusion provides the opportunity for interaction. This finding is consistent across the pre-school, elementary, and high school levels (Esposito & Peach, 1983; Handlers & Austin, 1980; McHale & Simeonsson, 1985; Towfighty-Hooshyar & Zingle, 1984). Interviews and questionnaires were also used to evaluate changes in attitude. Interviews were conducted when pre-schoolers and young elementary school aged children were evaluated in order to control for reading level. Of course, it is possible that many of these children did not comprehend the questions when they were asked orally due to their age and developmental level. This could lead to inaccurate responses. At the higher levels students were asked to evaluate their own attitude change. This makes it difficult to determine whether or not these students truly experienced a change in attitude or if they reported that they did in order to please the investigator.

Whether or not nondisabled children experience an increase in their self-esteem as a result of their relationships with special needs students remains unclear. Bear et al. (1991) found that Grade 3 nondisabled boys in inclusive settings reported high ratings of self-concept. On the other hand, Cutbirth and Benge (1997) found that their population, of 12 to 19 year old children, had a negative perception of inclusion. This negative perception cut across the category of self-concept. Inconsistencies among these studies may stem from the fact that the participants were of different ages. It may be that a higher self-perception exists at the elementary school levels, but that this benefit dissipates

as these children enter high school. Further research that investigates this possibility is warranted. It is important to note that the majority of the studies reviewed, that addressed this issue, were anecdotal. Further studies should correct for this through the use of experimental studies that use standardized measures.

Inconsistencies are also found in the literature that looks at the academic outcomes of nondisabled students. Anecdotal reports by parents, teachers, and students indicated that nondisabled students suffer academically as a result of their participation in inclusive classrooms (Cutbirth & Benge, 1997; Shipley, 1995). However, studies that used more standardized measures such as the Standford-Binet Test, or the Student Progress Record revealed that there are no differences between the academic progress of nondisabled students in inclusive classrooms in comparison to those in segregated classrooms (Block & Zeman, 1996; Odom et al., 1984; Rankin & Beuter, 1985; Staub & Peck, 1995). As it can be seen, the use of different methodologies may account for these inconsistencies. Problems associated with the use of anecdotal reports, such as questionnaires and interviews, have already been mentioned. Of course standardized tests also present themselves with problems. These tests may not show good content validity. In other words these tests may not accurately represent the area that they purport to measure (Gall et al., 1996). Thus, although some studies may claim that nondisabled students are not held back in their academic progress, the tests used to measure this may not accurately represent these children's academic development. Research that uses a

combination of both anecdotal reports and standardized tests may be necessary in order to reach accurate conclusions about the academic progress of nondisabled students in inclusive classrooms.

Reports from teachers and students implied that nondisabled children lose out on teacher time when special needs students are present in the classroom (Cutbirth & Benge, 1997; Willis, 1994). Staub and Peck (1995) stated that observations have revealed that this is not true. Although these studies appear to make valid claims the limited amount of experimental research available in this area makes it difficult to draw conclusions. Research that investigates the actual length of time that a teacher spends with each of his/her students would help to form more definitive conclusions.

Whether or not special needs children in inclusive settings act as poor role models for the nondisabled children also remains a question. Observations performed by Odom et al. (1984) revealed that these students do act as poor role models. On the other hand Staub and Peck (1995) stated that observations made by parents and teachers illustrated that this claim is false. Again, the limited amount of research available makes it hard to form conclusions. The methodology used by these investigators may have influenced the conclusions drawn. When observation is used several problems arise. Observational data may only partially represent the construct that is being investigated. When observations of inappropriate behavior are made, imitation may not be what is being observed. When an observer enters a setting, they unintentionally change the nature of the situation (Gall et al., 1996). Therefore an investigator who

observes a classroom for a limited amount of time may not get the same impression as a teacher who is always present in his/her classroom and who may observe more natural behavior. These problems in methodology may explain the differences reported by Odom et al. and Staub and Peck.

RESEARCH METHOD

Research Design

The purpose of this thesis was to inquire into the present state of affairs in inclusive classrooms. The focus was on how both teachers and students, who attend and work in inclusive settings, feel about how nondisabled children are effected by the presence of special needs children in the classroom. The design of this study, therefore, took on a descriptive nature. The opinions and feelings of the sample were collected through the use of several questionnaires and discussions.

Sampling Procedure

The present sample of teachers and students was selected from three elementary schools on the West Island of Montreal. All three schools are members of the same English language school board. This school board has adopted an inclusive policy so that children of all abilities and disabilities are accepted in these schools. The teachers in this sample were drawn from all of the teachers, Kindergarten through Grade 6, who work at these schools. Among the 55 teachers given the questionnaire, 33 of them completed and returned it, giving a 60 % response rate. Teachers who work at all grade levels were included so that input could be collected from diverse perspectives. The sample of students consisted of children drawn from each of the sixth grade classrooms in these schools. Out of those given consent to participate, 61 children were present on the days that the questionnaires were administered. Grade 6 students

were chosen in order to assure a reasonable level of understanding. It is also assumed that many of the students in the sample would have had a considerable amount of experience in an inclusive school.

Data-Collection

Teachers

In a review of the literature several instruments were located that were designed to determine the attitudes of teachers towards inclusion. These instruments include the Attitudes Toward Mainstreaming Scale (ATMS), developed by Berryman and Neal in 1980, the Educational Attitude Survey (EAS), developed by Reynolds and Greco in 1980, the Mainstreaming Opinionnaire (MO), developed by Shmelkin in 1981, the Opinions Relative to Mainstreaming (ORM), developed by Larrivee and Cook in 1979 (Antonak & Livneh, 1988), and the Mainstreaming Questionnaire, developed by Garvar-Pinhas and Schmelkin in 1989. Although several variables that examine the effects of inclusion on nondisabled children are present in these likert-type questionnaires, none of them were designed to focus specifically on this aspect.

The Inclusion Questionnaire - Teacher Version (see appendix A) was therefore developed based on these five scales. Items relating to the effects of inclusion on nondisabled children were pulled from each. A review of the items was then performed in order to assure that items pertaining to all aspects of this issue were included. It was found that none of the questions related to the nondisabled children's self-concept. Therefore, two questions were added for a total of 25 items. These items include 4 questions pertaining to the children's

attitude, 2 questions related to their self-concept, 6 questions about their curriculum and academic progress, 2 questions related to the learning of undesirable behaviors, 5 questions concerning the loss of teacher time, and 6 questions to determine the teacher's overall feelings. The teachers were instructed to circle the response that best fits their opinion of each statement. These responses ranged from agree very strongly to disagree very strongly. A section for comments was provided after each question so that the teachers could elaborate on their feelings and opinions, allowing a better understanding to be obtained.

Pilot testing took place for this questionnaire. A sample of four teachers was asked to fill out the questionnaire. A section for comments was included in order to receive feedback about any changes that they felt should be made. These teachers were asked to complete the questionnaire again two weeks later in order to test for reliability. A test-retest reliability coefficient of 0.994 was obtained. Several teachers stated that question number 2 was difficult to understand. The wording of this question was therefore changed from "Segregating special needs children frees nondisabled students from restrictions imposed upon them by inclusion" to "Including special needs children in the regular classroom imposes restrictions upon nondisabled children." All of the teachers agreed that the modified version of the question was much clearer.

Students

The attitudes and opinions of Grade 6 students were assessed in order to determine how they feel they are affected by the inclusion of special needs

children in the regular classrooms. This assessment took place by means of a questionnaire and group discussion.

An extensive review of the literature revealed that the majority of investigations, which focus on the effects of inclusion on nondisabled students, are limited to the attitudinal component. This is reflected in the scales currently available throughout the literature. These include The Primary Student Survey of Handicapped Persons (Esposito & Peach, 1983), The Acceptance Scale (Voeltz, 1980), The Scale of Children's Attitudes toward Exceptionalities (Miller & Loukellis, 1982), The Attitude Survey (Block & Zeman, 1996), and The Attitude Questionnaire (McHale & Simeonsson, 1980). Horne (1985) states that "we may have yet to discover other ways in which nonhandicapped students are influenced by interactions with handicapped students" (p.242). A scale that attempted to focus on *all* aspects of the effects of inclusion on nondisabled children was therefore developed for the purpose of this study.

This Inclusion Questionnaire - Student Version (see appendix B) was administered to the Grade 6 sample in order to determine: 1. Their attitudes towards special needs children, 2. The effects of inclusion on their self-concept, 3. How they feel their academics or curriculum is affected by the presence of special needs children, 4. If they believe that they lose out on teacher time and attention, and 5. If they believe that they learn undesirable behaviors from the special needs children. A vignette about a disabled boy named Billy was read orally to each class by the investigator. The participants were asked to imagine that this child was coming into their class. They were then told to respond, as

honestly as possible, to 15 statements, also read orally by the investigator, about how they would feel about this boy's presence in their classroom. These statements consisted of three questions for each of the five areas mentioned above. The children were instructed to mark one of three response items on the answer sheet provided (see appendix B). These options included a Yes to signify "I agree", a No to signify "I disagree", and a Maybe if the participant was not sure. This projective technique was chosen in order to reveal the participants inner thoughts and because it is less subject to faking than self-report inventories (Gall et al., 1996). Once the response sheets were completed and collected, a discussion about the effects of this imaginary boy's presence in the students' class took place. This was done in order to develop a better understanding of the students' feelings and opinions.

Pilot testing was conducted in order to determine if the scale was appropriate for the sample. First, a Grade 6 teacher was asked to read the vignette and determine if such a student could potentially be a student in their classroom. This teacher was also asked to read the questions in order to determine if they felt that such questions are understandable to Grade 6 children. Both the vignette and questions met with this teacher's approval. A small group of four Grade 6 children, chosen from the sample population, were then asked to fill out the questionnaire. This group was asked to fill out the same questionnaire one week later. A test-retest reliability coefficient of 0.989 was obtained. The opinions of these students were sought, regarding the comprehension of the questionnaire. Each student determined that the questions were understandable.

Data Analysis

Scores for each participant were calculated based on the following method. For the teachers, items number 1, 4, 8, 9, 11, 16, 17, 21, 23, 24, 25 were scored as follows: Agree very strongly = 5, Agree strongly = 4, Agree = 3, Disagree = 2, Disagree strongly = 1, Disagree very strongly = 0. Reverse scoring took place for the remaining items. The possible range of scores was from 0 to 125. High scores represented the view that inclusion has a beneficial effect on nondisabled students. For the students each "Yes" response was scored with a 2, each "No" response with a 0 and each "Maybe" response with a 1 for items 2, 5, 6, 9 ,11, and 13. Reverse scoring took place for the remaining items. The possible range of scores was from 0 to 30 with higher scores indicating a more positive effect of inclusion on nondisabled children. Measures of central tendency, particularly mean scores, were then calculated for each sample of both teachers and students in order to get an overall picture of their opinions. Measures of variability were calculated in order to assess the dispersion of scores around the mean.

Measures of central tendency and variability for each category were also calculated in order to determine the feelings and opinions of the sample for each area. These areas include nondisabled children's attitudes towards individuals with special needs, nondisabled children's self-concept, academics, teacher time and attention, and the learning of undesirable behaviors.

The comments furnished by the teachers were reviewed. Patterns related to the feelings expressed by the teachers were determined in order to support

and better explain the scores found through the use of the questionnaire. The discussions that took place amongst the students following the completion of the questionnaire were also reviewed. Comments derived from these discussions were categorized to exemplify the opinions and feelings of the students reported in the questionnaires.

Protection of Human Participants

Steps were taken in order to protect the participants. Informed consent was obtained from the teachers. The teachers were asked to sign a consent form (see appendix C). This form notified the participants about what they were expected to do, what information would be disclosed to the researcher, how the data collected would be used, that their privacy would be maintained, and that they have a right to withdraw from the study at any time. In order to ensure confidentiality, the teachers were asked not to sign their name on the questionnaire. When they completed it, they were told to place the questionnaire in one envelope and the consent form in another. This way their name could not be associated with their responses.

Assent from the students was attained along with consent from their main guardian, and permission from the school principal and classroom teacher. The children's main guardian was given the same information as was mentioned above for the teachers (see appendix D). The children were assured that their participation in the study would not affect their grades, their teacher would not see their responses, and their responses would remain confidential. In order to assure their privacy, the students were asked to not write their names on the

response form and to place it directly into an envelope when they had completed the task. The children were asked if they had any questions in order to assure that they understood the purpose of the study.

RESEARCH FINDINGS

Teachers

Each questionnaire was scored based on the teachers' responses (raw scores and ranges are presented in appendix E). Mean scores and standard deviations were calculated for the sample as a whole as well as for each area of attitudes, self-concept, curriculum and academic progress, teacher time and attention, and behavior (see Table 1). The anecdotal reports given by the teachers were then categorized in order to support and exemplify the statistical findings.

Table 1

Means and Standard Deviations for each Category – Teachers

	Overall	Attitudes	Self-Concept	Curriculum	Teacher Time	Behavior
Range	0-125	0-5	0-5	0-5	0-5	0-5
Mean	67.61	3.26	2.97	2.39	2.03	3.17
SD	19.77	0.67	0.95	0.98	1.06	0.93

Overall Findings

On the scale of 0 to 125 the sample of teachers scored an overall mean of 67.61 (SD=19.77). This score indicated that, on a scale from disagree very strongly to agree very strongly this sample agreed with the hypothesis that participating in an inclusive classroom has a positive effect on nondisabled students. This sample therefore fell just over the mid-point of the scale. This

opinion is exemplified by the comments given by the sample of teachers. Several teachers wrote that inclusion is an "ideal" theory that can successfully serve nondisabled students. These students can receive quality education in inclusive classrooms and benefit from this type of setting by developing a sense of caring and understanding towards their special needs peers. However teachers appeared to be dissatisfied with the present system. As one teacher explained, "Assuming that adequate support is provided for the special needs student then it is not a problem." Currently, adequate support does not appear to be a reality. One teacher of 26 years wrote "The classes are too large, the resources too few, and the demands on the classroom teacher too many!!!" Several teachers expressed that recent cutbacks by the government and school board have made success in inclusive settings difficult for nondisabled children. The present system does not seem to live up to it's potential by adequately accounting for fundamental factors. These include class size, number of children with special needs present in each classroom, type of disabilities present, and support systems available for the teachers and students such as integration aides and resource teachers.

Attitudes

Teachers in this sample agreed with the hypothesis that nondisabled children in inclusive educational settings hold positive attitudes towards individuals with special needs. This is shown by a mean score of 3.26 (SD=0.67) on a scale of 0 to 5. The teachers' comments suggested that inclusive classrooms help nondisabled children to "...understand that we are all different",

and "...learn that we all have strengths and weaknesses." This setting helps children to become "...better sensitized to the needs of others." Approximately 91 % of all of the teachers in the sample at least agreed that inclusion offers mixed-group interaction, which fosters understanding and acceptance of differences. One teacher explained that, "There is understanding and acceptance if the necessary components are in place - adequate support, communication, a qualified teacher, and good modeling by the teacher." Holding a positive attitude was also reported to depend on the child's age, their awareness of special needs, and the type of disabilities that the included children have. Although most of the teachers agreed that inclusion usually fosters understanding one teacher stated that, "...it, also, at times can bring out resentment and frustration which in turn leads to rejection rather than acceptance of differences."

Self-Concept

In terms of self-concept, the sample of teachers scored a mean of 2.97 (SD=0.95) which indicated that they agreed with the hypothesis that nondisabled children in inclusive educational settings have high evaluations of self-concept. The comments given by the teachers illustrated this finding. They stated that, "Nondisabled students take special needs students under their wing and feel good helping", "When abled students do lovely things with the disabled it gives them a sense of self-worth", and finally, working with a special needs student "...can be a good learning experience." Several teachers remarked that it might be that only a few special nondisabled students have the potential and selflessness to assist special needs children and feel good about this experience.

One teacher proposed that self-concept, on the part of the nondisabled students, is only affected if the relevant activity is appropriate, if the nondisabled children are given a break from helping, they are acknowledged for their good work, and they are given adequate support from a teacher with a positive attitude.

Curricular and Academic Progress

On the 6 questions related to curriculum and academic progress this sample scored a mean of 2.39 (SD=0.98). This score implied that the teachers disagreed with the hypothesis that nondisabled children in inclusive educational settings do **not** suffer academically. Hence, the teachers in this sample expressed that they believe that nondisabled children suffer academically when special needs children are included within the regular classroom. Teachers reported that the quality of education is lowered due to inclusion. Instruction becomes very basic and the language used to instruct is not developed. Anecdotal reports suggested that the regular curriculum is still being implemented, with modifications for the special needs students, but that this is often difficult to do without certain factors, which are missing in today's schools. These factors include proper support for the teachers and students, class size, and the number of special needs students present in each classroom. Teaching efficiency, and thus curricular progress, was reported to be impacted because "...at present, there are not enough support systems in place. Under better conditions it would not reduce teaching efficiency." One teacher's remark exemplified the present circumstances: "It's very challenging to plan programs, space, content, interactions, seating, monitoring, interviews, and individual

education plans while keeping the focus on teaching the whole class basic level skills." However, most teachers mentioned that all of this is possible when proper support is given: "If modifications are not made, no one benefits. Teachers must be flexible and this is difficult for some. When proper support is given, anything is possible." However, today's schools seem to have become an "unmanageable problem" because the above mentioned factors are not being adequately controlled for. The lowered quality of education and teaching efficiency, due to the present circumstances, seems to have impacted the nondisabled students' academic progress. "The nondisabled students don't improve as fast as they would in a regular class", "Programs can only be taught with classes learning step by step and following each lesson with progress. Special needs students tax this system with needs that can best be met with special education teachers." However, "...as long as classes are kept small and there is adequate support (through the use of integration aides and resource teachers)..." successful academic progress can be accomplished by all.

Teacher Time and Attention

The present sample of teachers disagreed with the hypothesis that nondisabled children in inclusive educational settings do <u>not</u> lose out on teacher time and attention. This area had the lowest mean score of 2.03 (SD=1.06) (see Figure 1). Due to the presence of special needs children in the regular classroom, teachers expressed that nondisabled students are losing out on their share of teacher time and attention. Time and attention is taken away in terms of

personalized instruction for those who need it, stopping classroom routines to deal with disruptive behavior, and hours spent in meetings, making special plans, setting goals and objectives, and phone calls. One teacher explained that, "I rarely have time to spend with any student except the special needs students who need one-on-one support." Almost 80 % of the teachers in this sample reported that the time teachers spend one-on-one with special needs students often exceeds the time spent one-on-one with nondisabled students. The teachers reported that, "Many, many hours are spent and needed when you have a special needs child." One teacher declared that, "I've often felt I've almost 'ignored' my special needs students at times so that they don't monopolize my time." Another teacher expressed that, "...it's not the time spent one-on-one but rather the increased time spent outside the classroom situation..." that drains the teacher's energy, leaving little for the nondisabled children. In order to assure that the nondisabled children are not losing out, the teachers expressed that resources are an absolute must. When integration aides are present in the classroom, on a full time basis, time is cleared up for the teacher to spend time with the nondisabled students. Or, if the teacher is working one-on-one with the special needs children in the classroom, the integration aide is available for the other children who may require assistance. However, the teachers indicated that currently "...there is not enough support due to budget cuts. It would not be to the detriment of others if there was sufficient support i.e. more time provided by a resource teacher, smaller classes etc...." Integration aides are often present in the classroom, however, most of their time was reported to be

spent assisting children with severe disabilities. Little time is therefore left over for children who are learning disabled, and require extra assistance, but do not need attention to help control their disruptive behaviors. The children with severe disabilities "...drain the resources..." so that the "...students in the 'grey area' (who are not diagnosed with a severe disability) are not given the time they deserve." One teacher clearly indicated how success for all could be accomplished by stating: "Inclusion works really well with integration aide support."

Learning Undesirable Behaviors

The present sample of teachers agreed with the hypothesis that nondisabled children in inclusive educational settings do not learn undesirable behaviors from the special needs students. On the 2 questions related to behavior the teachers scored a mean of 3.17 (SD=0.93). In fact, 82 % of the teachers in this sample at least disagreed with the statement that including special needs students in regular classes contributes to negative behavior patterns on the part of the nondisabled students. Several teachers explained that at times a bad example is set for only certain cases. Some teachers mentioned that undesirable behaviors are sometimes learned: "Certain students model the negative behavior of special needs children because they want to be special and receive extra help, support, and attention. One child said 'I want to be handicapped like_____'." This usually was reported to be the case when a disabled child with a behavioral or emotional problem is present in the classroom. The only other reason why this was reported to occur is in classrooms where

"...the ratio of special needs is not being balanced in homogeneous groups. Classes are becoming special education without ratios. So more then 50 % of classes at times have special needs kids." Most children on the other hand "...quickly see the differences or are made aware and become quite tolerant." One teacher remarked that special needs children "Do not set a bad example if the other students are aware of the special needs student's disability."

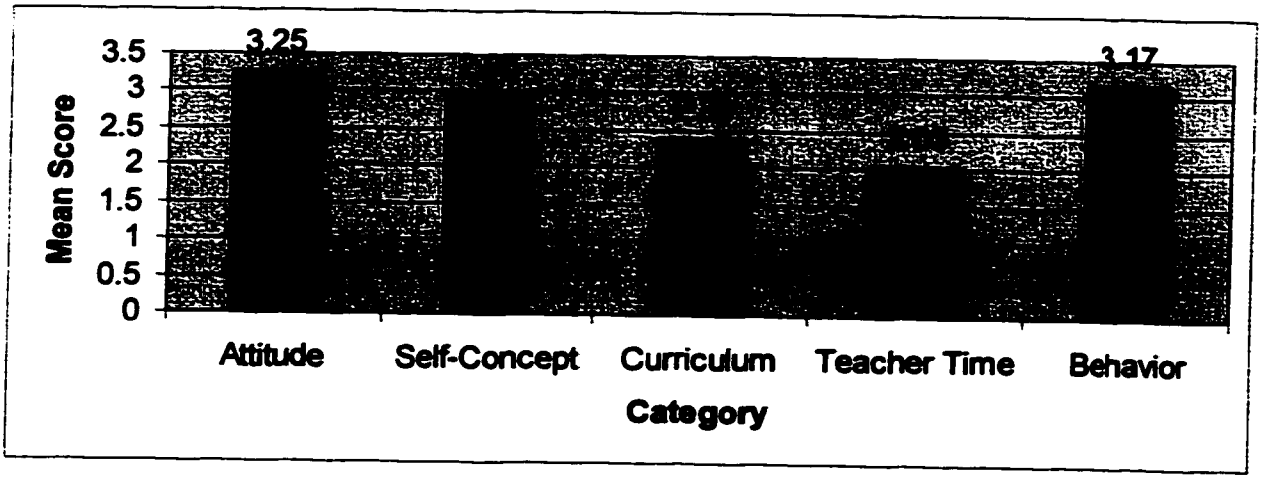

Figure 1. Summary of means for each category – Teachers

Students

The questionnaire administered was scored (raw scores and ranges are presented in appendix F), and the comments given by the students were categorized. The calculated scores consisted of means and standard deviations for the entire questionnaire as well as for each of the five categories of attitudes, self-concept, curriculum and academic progress, teacher time and attention, and

behavior (see Table 2). The students' comments were categorized based on these same classifications.

Table 2

Means and Standard Deviations for each Category – Students

	Overall	Attitudes	Self-Concept	Curriculum	Teacher Time	Behavior
Range	0-30	0-3	0-3	0-3	0-3	0-3
Mean	16.87	1.31	1.37	0.97	0.22	1.78
SD	4.47	0.65	0.45	0.57	0.29	0.35

Overall Findings

The overall mean score found for the students was 16.87 (SD=4.47). This indicated that on a scale consisting of disagree, maybe, and agree the students were undecided as to whether or not they agreed or disagreed with the hypothesis that participating in an inclusive educational setting has a positive effect on nondisabled students. This score placed the students just over the mid-point of the scale. The students' feelings were reflected in the comment made by one student:

> I think that disabled kids should be at this school because they should be allowed to go to school wherever they want and because at this school there are other kids who can help them...but sometimes when disabled students are in my class they really distract me from my work.

The nondisabled students seemed to recognize the advantages of inclusion for both themselves and their special needs peers, but appeared to be uncertain if the advantages outweighed the disadvantages. Many of the students appeared more concerned with whether or not their school was the appropriate educational setting for their special needs peers then they were about how this setting was affecting their own educational experience: " It would be better for a disabled student to be in a special school or a class because there they can get help from people who are trained to work with them"; "Some disabled kids should be in this school but not all of them, it depends on their needs." Several students told stories of certain incidences that occurred with a special needs peer such as when a teacher yelled at a special needs student or the student had to be removed from the room. When asked how they thought that these incidences affected them, the students shrugged their shoulders and said: "It didn't affect me."

Attitudes

On a scale of 0 to 3 the students scored a mean of 1.31 (SD=0.65), indicating that they were undecided as to whether or not they agreed or disagreed with the hypothesis that nondisabled students in inclusive educational settings hold positive attitudes towards individuals with special needs. This opinion was reflected in this samples' own feelings about individuals with special needs. Less than half of the students in the present sample said it would be okay if a special needs peer sat next to them on the bus or during a field trip. Approximately the same number of students, 42.6 %, said that it would be okay if

a special needs student wanted to play with them at the park. The students' experience, with children with special needs at their school, appeared to result in mixed feelings. One student reported that at times he feels frightened of special needs children because, "Once at recess, there were no teachers around, and this one kid bit my friend." On the other hand, another student appeared to recognize how special needs and nondisabled individuals can share a common identity: " I think that disabled kids should be at this school because they are just like the rest of us, they just need a little bit more help with their work."

Self-Concept

The students in this sample were, again, undecided about whether or not they agreed or disagreed with the hypothesis that nondisabled children in inclusive educational settings have high evaluations of self-concept. The mean score in this area was 1.37 (SD=0.45). It was found that 82 % of the students reported that they would feel good about themselves for helping a student with a special need. However, only 57 % of them would volunteer to be a buddy for a special needs child in their class. One student volunteered that she was a buddy to a student in her class and said, " I really liked it." Another student agreed that being a buddy is a good experience but added, "...it takes up a lot of time from my own work when they ask me questions during class." When we examine self-concept through Festinger's social comparison theory we see that only 34 % of this sample reported that they would feel good about the work they do in school if they compared themselves to a special needs child in their class.

Curricular and Academic Progress

In terms of curriculum and academic progress the students scored a mean of 0.97 (SD=0.57) indicating that they disagreed with the hypothesis that nondisabled children in inclusive educational settings do **not** suffer academically. This finding was reflected in the students' comments. One student declared openly that when special needs children are present in the classroom, " The curriculum is definitely slower." Another child expressed his frustration with the current situation: "We definitely get bored because we understand but there are some kids that don't and the teacher has to explain over and over and we're like falling asleep." Several children recognized the need for integration aides so that academic progress is not stifled due to a slow moving curriculum: "There are some kids who are slower and sometimes they go to the resource room but most often they're in my class and when they're there it's really slow and I get bored. These kids don't have integration aides." As was reported by the teachers, one student mentioned that, "There is a lot of support for the really disabled kids but not for those that are kind of slow." This situation seems to cause a problem because, as one student explained, " Some of the disabled students have integration aides, but not all the time, and they end up just walking around." These circumstances appear to have an effect on the nondisabled students' academics as was illustrated by one Grade 6 boy: " When disabled students are in my class they really distract me from my work."

Teacher Time and Attention

The students in this sample disagreed with the hypothesis that nondisabled children in inclusive educational settings do not lose out on teacher time and attention. This area obtained the lowest mean of 0.22 (SD=0.29) (see Figure 2). It was found that 80 % of the students agreed that if a special needs student were present in their classroom, the teacher would need to spend a lot of time reminding that student about the rules of the classroom. This was reflected in the comment given by one Grade 6 boy: " I get frustrated because I don't have enough time to get through my work because the teacher has to keep explaining things to kids who forget so we end up getting a lot of homework." Another student explained how children with special needs can sometimes consume the teacher's time by describing an incident that happened in her class:

> Once there was this one kid who is disabled who kept calling things out and never put his hand up. The teacher was trying to explain something but kept having to stop to remind this kid not to bother the class. Then the teacher just got really mad and started yelling. The teacher seemed really frustrated.

Approximately 75 % of this sample of students reported that they believe that if a special needs student was present in their class the teacher would need to spend a lot of time with him/her. As was mentioned earlier, several students stated that only the severely disabled students in their school have integration aides to assist them with their work. This situation therefore often leaves many nondisabled students to fend for themselves: "Sometimes my teacher works with a small group of kids, who don't understand very well, while we work on our own." When this student was asked how this made her feel she responded that

"...sometimes it's okay when I understand what to do but other times I get really annoyed because the teacher doesn't have any time to answer my questions if I don't understand."

Learning Undesirable Behaviors

The students were undecided as to whether they agreed or disagreed with the hypothesis that nondisabled children in inclusive educational settings do not learn undesirable behaviors from the special needs children. A mean score of 1.78 (SD =0.35) was found for this area. This opinion is reflected in the findings that the majority of the students, namely 97 %, indicated that they would not copy the undesirable behavior of a special needs child in their class. However, only 57 % of the students reported that their classmates would not copy these behaviors. Many of the Grade 6 students appeared to be aware of which students have special needs and that these needs are the cause of certain behaviors: "There's this one kid in my class who always like buds in line and pushes people, but he's disabled." One student reported an event where she believed one of her classmates began acting like a special needs student just to get attention:

> In one of my classes there was this disabled kid who always ran out of the class without asking. And once this other kid wasn't allowed to leave the class to go to the bathroom so he just ran out. When he came back the teacher asked him why he did that and he just said, "well if _____ can do it why can't I?

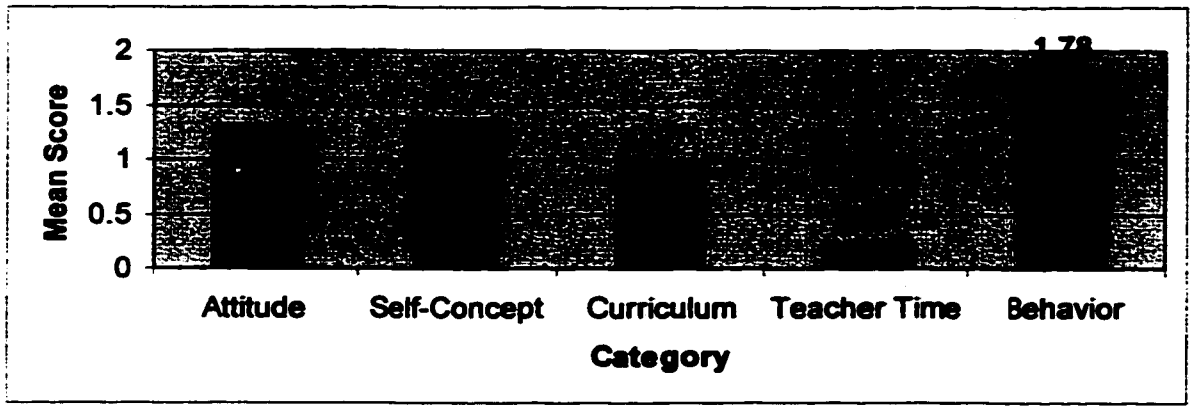

Figure 2. Summary of means for each category – Students

DISCUSSION

This thesis set out to determine to what extent nondisabled children are affected by the presence of special needs children in inclusive classrooms. Through the use of likert-type scales and anecdotal reports, both elementary school teachers and Grade 6 students were asked to share their feelings and opinions surrounding this issue.

The students in this sample all appeared to share a similar perspective. No significant differences were found for this group based on gender or experience in an inclusive school. A wide range of opinions, however, was found for the teachers. One variable that could account for this is the wide range of teaching experience in this sample. A t-test determined a significant difference between the opinions of less and more experienced teachers. Less experienced teachers, who have less than 15 years experience ($\underline{M} = 74.67$, $\underline{SD} = 3.42$), reported that inclusion has a more positive effect on nondisabled students, then did the more experienced teachers ($\underline{M} = 64.25$, $\underline{SD} = 4.77$), $\underline{t} = 6.59$, $p < .01$. More experienced teachers, who were present in the system before inclusion became the policy at the schools in this study, may be evaluating the educational experience of nondisabled students in comparison to what the school system was like prior to the introduction of inclusion. The lower mean score on the part of the more experienced teachers may indicate that they believe that nondisabled children had a more positive educational experience when special needs children were not present in the regular education classrooms. This finding may thus

reflect a more negative attitude towards inclusion on the part of the more experienced teachers. Less experienced teachers appear to hold a dissimilar philosophy with regards to inclusion. Perhaps changes in teacher training, or the simple fact that the present system is the one that less experiences teachers are familiar with, could explain these results.

Both samples fell just above the mid-point of their scales, indicating that they believe that an inclusive educational setting has a positive effect on nondisabled students, but that this feeling is not very strong. The opinions expressed by both the teachers and students seem to indicate that they believe that inclusive schools have the potential to provide nondisabled children with a positive educational experience. However, the participants in this sample appear to be dissatisfied with the present system.

Both teachers and students reported that the areas most negatively affected by the presence of special needs students surround curriculum and academic progress, and teacher time and attention. The limited amount of resource support presently available at the participants' schools appeared to be the main factor in causing this negative effect. Both teachers and students indicated that when resource teachers and integration aides are adequately represented, success in these areas can be accomplished. Research reported by Willis (1994) and Carlson et al. (1981) has demonstrated this possibility of success. Presently, these schools appear to lack the support they need. Other factors shown to affect the academic progress and amount of teacher time spent with nondisabled students include class size, number of children with disabilities

present in each classroom, and the type of disabilities accepted into inclusive classrooms. The current state of regulation in these areas seems to have a negative effect on the nondisabled children.

The teachers in this sample appear to believe that inclusive settings foster acceptance and understanding of differences. They report that their nondisabled students, who participate in inclusive settings, are tolerant and sympathetic towards individuals with special needs. However, the students in this sample did not appear to be as accepting as was reported by their teachers. This coincides with the research reported by McHale and Simoensson (1985). These researchers stated that exposure to special needs children within the classroom can sometimes lead to negative attitudes on the part of the nondisabled children. In the present sample, less than half of students expressed that they would want to interact with a special needs child. This disinterest may reflect a negative attitude towards individuals with special needs. The present situation in inclusive classrooms, with limited resource support, large classes, and many special needs students may create frustration on the part of the nondisabled students, causing resentment and thus rejection of children with special needs, rather than acceptance of differences.

The teachers in this sample reported that they believe that the students in their classes feel good about themselves after helping peers with special needs. The students confirmed this belief by reporting this same finding. However, only about half of the students stated that they would volunteer to help a peer in need. Therefore, as was mentioned by several teachers, it may be that only a few

exceptional nondisabled students benefit from assisting the special needs children in their class. Furthermore, these students may be the ones who do not require a boost in their self-concept. As was mentioned above the attitudes that this sample of students has towards individuals with special needs appears to stop them from wanting to interact with their special needs peers. This in itself may be prohibiting some students from volunteering to assist a special needs peer thus preventing them from feeling good about themselves for helping a classmate in need.

In terms of behavior the findings appear to indicate that nondisabled children in these inclusive settings do not copy the inappropriate behavior that is at times displayed by their special needs peers. Many of the students in this sample appear to be aware of their peers' needs and therefore understand the behavior that may sometimes occur. A bad example may, however, be set for certain students. Yet, once these students are made aware of the circumstances surrounding their peers' behavior, the teachers report that, the nondisabled students quickly become tolerant.

Limitations of the Study

The sample selected for this study was small and limited to three schools. The findings therefore are difficult to generalize to other inclusive schools. It may be that teachers at other schools feel differently about the effects of inclusion on nondisabled children and that students in different grades and at other schools also hold a different opinion. Due to the fact that the sample of teachers were asked to volunteer their own time to fill out the questionnaire, those who spent

more time writing many comments about inclusion may hold dissimilar beliefs to those who didn't write many comments or did not fill out the questionnaire at all. This may also be the case for the students. Those who gave assent, and were given consent, may hold different opinions about inclusion in comparison to those who did not participate. The students were also asked to expand on their feelings about inclusion, orally, in front of their classmates. This may have prohibited several students from volunteering their opinion, especially considering the controversial issue at hand. Those who did offer their opinion may have done so in an attempt to present themselves in a favorable manner. The students true opinions surrounding the effects of inclusion may, therefore, not have been expressed.

The investigator developed the questionnaires administered in this study. Although an attempt was made to correct for problems in previous research by supplementing quantitative findings with qualitative reports, potential problems surrounding the questionnaires should still be noted. The test-retest reliability of these measures was checked, however, other issues surrounding the reliability and validity of the questionnaires still remain. Despite the fact that pilot testing was done to assure that the questions were understandable to the participants some items may still have been unclear, resulting in incorrect responses and false conclusions. A section for comments was made available for the teachers and a discussion with the students was performed in order to probe deeper into the opinions of the participants. However, some of the teachers did not take the time to expand on their opinions and several students did not volunteer any

information in front of their class. Perhaps these individuals would have felt more comfortable in a one-on-one interview with the investigator. This method may have allowed for further analysis into the feelings of the participants.

Implications for Practice

The participants in this study are of the opinion that inclusion can potentially be a successful educational setting for nondisabled students. This is a promising conclusion for proponents of inclusion who are working to keep special needs students within the mainstream of regular education. However, both teachers and students in this sample are dissatisfied with the current policies regulating this system. It appears that nondisabled students would benefit more fully from an educational setting that more strictly regulates class size, number of special needs children present in each classroom, type of disabilities allowed at inclusive schools, and, most importantly, amount of resource support available to both the teachers and students at these schools (Carlson et al., 1981; Rampaul & Freeze, 1991; Willis, 1994). Without appropriate regulation in these areas, this study shows that nondisabled students are missing out on important educational experiences.

These experiences include missing out on teacher time and attention and academic progress. If the current policies regulating this educational system are not changed perhaps a change in teaching strategies or curriculum implementations could help to alleviate these problems. Shipley 's1995 research revealed that teachers may be inadequately prepared and trained to teach in inclusive classrooms. Better teacher training that focuses on how to run a

successful inclusive classroom should be implemented so that both special needs and nondisabled students can benefit from a positive inclusive educational experience.

Although the teachers in this sample appear to believe that the inclusive schools in this study promote understanding and tolerance of differences, the students questioned did not appear to be overly accepting of their special needs peers. This may be due to the fact that the current system, with lenient regulations, promotes resentment rather than acceptance. Perhaps better regulated policies within inclusive schools would overturn these findings. A curriculum that addresses issues related to individuals with special needs within the classroom may also pave the way towards more accepting attitudes. Such a curriculum was found to promote positive attitudes in a study reported by Handlers and Austin (1980).

Implications for Future Research

The present study took on a descriptive nature in order to examine whether or not inclusion has an effect on nondisabled children. It can be concluded that the present system is affecting the educational experience of these students. Further research should therefore be conducted in order to verify these findings and elaborate on them. A comparison between inclusive and segregated schools should be made in order to determine any differences. Specific areas found to be more negatively affected, such as academic progress and teacher time, should be further examined in order to get a more accurate picture. For example, the amount of time teachers spend one-on-one with

nondisabled students in inclusive schools compared to the amount of time spent in segregated schools should be studied. The teachers in this sample report that the effects on nondisabled children vary depending on the type of disabilities present in the classroom. Investigations should be made into which type of disabilities can be present with favorable outcomes. Another factor identified as being a pre-requisite to successful inclusion has been teacher attitudes (Hayes & Gunn, 1988; Stafford & Green, 1993). This variable should be explored with regard to how it may effect the outcomes of nondisabled students. Finally, research should examine whether or not classrooms with more strict regulations have more successful outcomes for the nondisabled children in terms of class size, number of special needs students, type of disabilities present, and sufficient resource support.

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APPENDIX A

Inclusion Questionnaire - Teacher Version

The following questionnaire is intended to determine teachers' opinions about the effects of inclusion on nondisabled children. Please circle the response that you feel best fits your opinion of each statement. Answer the questions as truthfully as possible according to your personal experience with inclusion. Please use the sections provided for comments in order to expand on your feelings and opinions. There are no right or wrong answers. Please do not write your name.

This questionnaire contains 25 questions. It should take approximately 15 minutes to complete.

Please circle the response, that best fits your opinion, according to the following scale:

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Number of years of teaching experience:_____

Number of years of teaching in an inclusive school:_____

Certification areas:_____

1. Inclusion offers mixed-group interaction, which fosters understanding and acceptance of differences.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

2. Including special needs children in the regular classroom imposes restrictions upon nondisabled children.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

3.The extra attention that special needs students require is to the detriment of the other students.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

4. The behavior of special needs students does <u>not</u> set a bad example for the other students.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

5. Having special needs students in regular classrooms lowers the quality of instruction to all students.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

6. The inclusion of special needs students in regular classes leads to the disruption of regular routines.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

7. Having special needs students in regular classrooms is not fair to either the special needs nor nondisabled students.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

8. The presence of special needs students in the regular classroom does not reduce teaching efficiency and learning.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

9. Contact with special needs students in regular classes helps the nondisabled students realize that their own problems are not unique.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

10. The special needs students in the regular classroom consumes too much of the teacher's time and attention.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

11. Nondisabled students, who assist special needs peers, benefit from heightened self-esteem.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

12. Including special needs students in regular classes contributes to negative behavior patterns on the part of the nondisabled students.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

13. Including special needs students requires significant changes in regular classroom procedures.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

14. The contact nondisabled students have with special needs students is harmful.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

15. Special needs students monopolize teacher time.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

16. The inclusion of special needs students is beneficial for nondisabled students.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

17. The presence of special needs students promotes acceptance of differences on the part of nondisabled students.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

18. The responsibility of educating a child with special needs in a regular class has an adverse effect on nondisabled students' education.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

19. The time that teachers spend one-on-one with special needs students often exceeds the time spent one-on-one with nondisabled students.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

20. Students with special needs have detrimental effects on nondisabled students in a regular class.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

21. The inclusion of students with special needs into the regular classroom will not harm the educational achievement of nondisabled students.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

22. The extra attention students with special needs require is to the detriment of the other students.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

23. Nondisabled students in inclusive classrooms experience high levels of self-esteem.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

24. Nondisabled students in inclusive classrooms hold positive attitudes toward disabled individuals.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

25. The presence of a student with special needs in the regular classroom does not inhibit the progress of his/her nondisabled peers.

Agree very strongly	Agree strongly	Agree	Disagree	Disagree strongly	Disagree very strongly

Comments:_____

_____

_____

APPENDIX B

Inclusion Questionnaire -Student Version

The following vignette will be read orally to the participants:

> Billy, a disabled 12-year-old boy, will be a new student in your class. He was born with a disability called Down's Syndrome. His disability has affected his speech and language so that he is often very hard to understand. Although he is in 6th grade, he often acts like someone who is in the 1st grade. He isn't able to read or write very well and he often forgets the rules of the class.

The following statements will then be read orally to the students. They will be asked to circle the response, on the response sheet, that best fits their feelings about these statements. The students will be told to circle Yes if they "agree", No if they "disagree", and Maybe if they are "unsure".

1. If Billy were in my class the teacher would need to spend a lot of time with him.
2. It would be OK if Billy sat next to me on the bus or on a field trip.
3. If Billy were in my class we would not be able to do certain activities.
4. If Billy behaved poorly, some of the other children would also start to behave poorly.
5. If I would help Billy with his work I would feel very good about myself.
6. If Billy wanted to play with me and my friends at the park, that would be OK.
7. If Billy were in my class he would probably need a lot of extra help with his work.
8. If Billy were in my class he would probably slow down the curriculum and we would need to wait for him to catch up.

9. If I compared myself to Billy I would feel good about the work that I do in school.

10. If Billy screamed out his answers without raising his hand I would probably do the same thing.

11. If Billy wanted to play with me at the park, that would be nice.

12. My teacher would probably need to spend a lot of time reminding Billy about the rules of the classroom.

13. I would volunteer to be a "buddy" for Billy. I would really enjoy helping someone who needs it.

14. My teacher would probably need to speak slower to the class so that Billy could understand.

15. If I saw that Billy was getting away with some poor behavior, I would start acting the same way.

Response Sheet

Gender: Male Female

I have been at this school since grade: _____

Please circle the response that best suits your feelings. Do **NOT** write your name.

1.	Yes	No	Maybe
2.	Yes	No	Maybe
3.	Yes	No	Maybe
4.	Yes	No	Maybe
5.	Yes	No	Maybe
6.	Yes	No	Maybe
7.	Yes	No	Maybe
8.	Yes	No	Maybe
9.	Yes	No	Maybe
10.	Yes	No	Maybe

11.	Yes	No	Maybe
12.	Yes	No	Maybe
13.	Yes	No	Maybe
14.	Yes	No	Maybe
15.	Yes	No	Maybe

APPENDIX C

CONCORDIA UNIVERSITY
DEPARTMENT OF EDUCATION

CONSENT FORM

INCLUSION AT THE ELEMENTARY SCHOOL LEVEL:
THE EFFECTS ON NONDISABLED STUDENTS
Tina Balazovjech, B.A.

Dear Teachers:

I am a graduate student in the Department of Education at Concordia University. I am presently conducting a research project under the supervision of Dr. Miranda D'Amico, in order to fulfil the requirements for a Master's Degree in Child Study.

This project is concerned with the effects of inclusion on nondisabled students. Nondisabled children who are integrated with disabled peers have been found to have diverse experiences due to their participation in an inclusive classroom. In order to investigate this issue regular education teachers and grade 6 students will be asked to complete a questionnaire.

You will be asked to fill out the attached questionnaire according to your own experiences teaching in an inclusive classroom. This questionnaire should take you approximately 15 minutes to complete.

I would appreciate it if you would fill out the questionnaire prior to April 14th and return it, sealed in the manila envelope provided, to Sonia Balazovjech.

Your consent is required to participate in this study. Informed consent procedures are described on the following sheet. Please take a moment now to read it.

For further information concerning this study, please feel free to contact me (#428-9411) or Dr. Miranda D'Amico (#848-2040) at the Department of Education, Concordia University.

Sincerely,

Tina Balazovjech

Statement of informed consent: I understand that I am free to withdraw my consent and discontinue my participation at anytime without negative consequences. I understand that my participation in this study is confidential. I understand that anonymous group findings from this study may be published. I understand the purpose of this study.

I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT. I FREELY CONSENT AND AGREE TO PARTICIPATE IN THIS STUDY.

Date: _____

Name: _____
(Please print)

Signed: _____
(Teacher)

Signed: _____
(Investigator)

Thank-you for having taken the time to fill in this form. Please seal it in the white envelope provided and return it with your manila envelope to_____.

APPENDIX D

CONCORDIA UNIVERSITY
DEPARTMENT OF EDUCATION

CONSENT FORM

INCLUSION AT THE ELEMENTARY SCHOOL LEVEL:
THE EFFECTS ON NONDISABLED CHILDREN
Tina Balazovjech, B.A.

Dear Parents,

I am a graduate student in the Department of Education at Concordia University. I am presently conducting a research project under the supervision of Dr. Miranda D'Amico, in order to fulfil the requirements for a Master's Degree in Child Study.

This project is concerned with the effects of inclusion on nondisabled students. Nondisabled children who are integrated with disabled peers have been found to have diverse experiences due to their participation in an inclusive classroom. In order to investigate this issue regular education teachers and grade 6 students will be asked to complete a questionnaire.

I will be asking your child to complete a questionnaire that will be administered orally. This process should last approximately 25 minutes.

Your permission is required in order to include your child in this study. Informed consent procedures are described on the following sheet. Please take a moment now to read it.

For further information, concerning this study, please feel free to contact me (#428-9411) or Dr. Miranda D'Amico (#848-2040) at the Department of Education, Concordia University.

Sincerely,

Tina Balazovjech

Statement of informed consent: I understand that I am free to withdraw my consent and discontinue my child's participation at anytime without negative consequences. I understand that participation in this study is confidential. I understand that anonymous group findings from this study may be published. I understand the purpose of this study.

I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT. I FREELY CONSENT AND AGREE FOR MY CHILD TO PARTICIPATE IN THIS STUDY.

Date: _____

Child's Name: _____
(Please print)

Signed: _____
(Parent)

Signed: _____
(Investigator)

Thank-you for having taken the time to fill in this form. Please return it to your child's teacher no later than_____.

APPENDIX E

Raw Scores, Means, Standard Deviations, and Range for each Category – Teachers

	Overall	Attitudes	Self-Concept	Curriculum	Teacher Time	Behavior
Teacher 1	75	4.25	4	2	1.8	5
Teacher 2	98	3.5	4.5	4.5	4.4	3.5
Teacher 3	57	3.25	3.5	0.67	1.8	4.5
Teacher 4	84	3.75	4.5	2.83	3	4
Teacher 5	102	4.75	4.5	3.5	3.4	4.5
Teacher 6	50	2.75	3	1.5	1.2	3
Teacher 7	73	3.25	2.5	2.67	2.6	3
Teacher 8	83	3.75	2.5	2.83	3.2	3.5
Teacher 9	115	4.25	5	4.67	4.4	4.5
Teacher 10	78	3.25	3	3.17	3	3
Teacher 11	86	3.75	3.5	3.33	2.8	3
Teacher 12	68	2.75	2.5	2.67	2.8	2.5
Teacher 13	71	4.25	3.5	2.5	0.8	4
Teacher 14	60	3.75	3.5	1.83	1.2	4
Teacher 15	70	3	2.5	2.83	2.8	2.5
Teacher 16	68	3.5	3	2.5	1.4	3
Teacher 17	51	2.25	2	2.17	1.4	2
Teacher 18	66	3	2.5	2.33	2.6	3.5
Teacher 19	25	2.5	2	0.33	0.6	0
Teacher 20	50	2.5	2.5	1.67	1.2	3
Teacher 21	63	3	2	2.67	1.6	3
Teacher 22	67	3	1.5	2.67	1.6	3
Teacher 23	66	3.25	3	2.5	2.6	2
Teacher 24	44	3.5	2	0.83	0.4	4
Teacher 25	52	3.25	2	1.33	1	2.5
Teacher 26	62	3.5	4.5	2.5	1.25	3.5
Teacher 27	55	2.5	3.5	2.17	1	2.5
Teacher 28	79	3	3	2.67	1.8	4.5
Teacher 29	74	3.25	2.5	3	2.8	3
Teacher 30	100	4.25	3.5	3.33	3	4.5
Teacher 31	26	1.75	1.5	0.5	0.4	1.5
Teacher 32	58	2.25	2.5	2.33	1.8	2
Teacher 33	55	3	2	2.17	1.4	2.5
Range	**25-115**	**1.75-4.25**	**1.5-4.5**	**0.33-4.67**	**0.4-4.4**	**0-4.5**
Mean	**67.61**	**3.26**	**2.97**	**2.39**	**2.03**	**3.17**
SD	**19.77**	**0.67**	**0.93**	**0.98**	**1.06**	**1.04**

APPENDIX F

Raw Scores, Means, Standard Deviations, and Range for each Category – Students

	Overall	Attitude	Self-Concept	Curriculum	Teacher Time	Behavior
Student 1	14	1.33	1.67	0.33	0.67	1.33
Student 2	20	2	1.33	1	0.33	2
Student 3	20	2	2	0.67	0	2
Student 4	22	2	1.67	1.33	0.33	2
Student 5	21	2	1.67	1	0.33	2
Student 6	24	2	2	1.67	0.33	2
Student 7	21	2	1.33	1	1	1.67
Student 8	17	2	2	0.67	0	1
Student 9	16	1	1	1	0.33	2
Student 10	13	1	0.67	0.67	0.33	1.67
Student 11	19	1	1.67	1.67	0	2
Student 12	13	0.67	0.67	0.67	0.33	2
Student 13	18	1.33	1.67	1	0	2
Student 14	17	1.33	1.67	0.67	0	2
Student 15	17	1	1.33	1.33	0	2
Student 16	17	1	1.33	1.33	0	2
Student 17	16	1	1	1.33	0	2
Student 18	18	1.67	1.67	0.67	0.67	1.33
Student 19	10	0	1	0.67	0	1.67
Student 20	1	0	0	0.33	0	0
Student 21	24	2	2	1.67	0.67	1.67
Student 22	18	1.33	1.33	1.67	0	1.67
Student 23	21	1.33	1	2	0.67	2
Student 24	14	1.33	1.33	0.33	0	2
Student 25	23	2	1.33	1.67	0.67	2
Student 26	14	0.67	1	0.33	0.33	2
Student 27	8	0	2	0.33	0	2
Student 28	23	1.67	0.33	2	0	2
Student 29	11	0	0.67	1.33	0.33	1.67
Student 30	12	0	1.33	1.33	0	2
Student 31	21	2	1.33	1.33	0.33	2
Student 32	18	2	1	0.67	0.33	1.67
Student 33	13	1	1.33	0.33	0	2
Student 34	23	2	1.33	1.67	0.67	2
Student 35	22	1.33	1.33	2	0.67	2
Student 36	17	1.67	1.67	1.33	0	1.3
Student 37	20	1.33	1.33	1.33	0	2

Student 38	18	1.33	1.33	1	0	2
Student 39	15	0.33	2	1	0.67	1.67
Student 40	22	2	1.33	1	0.33	2
Student 41	20	2	1.33	1.33	0	2
Student 42	18	2	1.33	2	0.33	1.33
Student 43	17	1.33	1.67	1	0	2
Student 44	17	1.33	1.33	1	0	1.67
Student 45	18	1.67	2	0.67	0.33	2
Student 46	20	2	1.67	0.67	0	2
Student 47	13	1	1	0	0	1.67
Student 48	12	1.33	1.33	0	0	1.67
Student 49	11	1	1.67	0	0	1.33
Student 50	20	2	1.33	0.67	0.33	2
Student 51	13	1	1.67	0.67	0	1.33
Student 52	17	2	1	0.33	0	1.67
Student 53	7	0	1.33	0	0	1.33
Student 54	20	1.33	2	1.33	0.67	2
Student 55	22	2	1.67	1.33	0	2
Student 56	15	1.33	2	0.33	0	1.67
Student 57	16	1.33	0	0.67	0	1.33
Student 58	14	0	1.33	2	0.67	2
Student 59	19	2	1.33	1.33	0	1.67
Student 60	13	0.67	1.33	0.67	0	1.67
Student 61	16	1	1	0	1	2
Range	**1-24**	**0-2**	**0-2**	**0-2**	**0-0.67**	**0-2**
Mean	**16.87**	**1.31**	**1.37**	**0.97**	**0.22**	**1.78**
SD	**4.47**	**0.65**	**0.45**	**0.57**	**0.29**	**0.35**