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EFFECTS OF CLASSROOM FACTORS ON TEACHERS’ SELF-EFFICACY AND THEIR BELIEFS ABOUT INTEGRATION

by

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A thesis submitted in conformity with the requirements for the Degree of Master of Arts
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Abstract

This study examined the effect of teachers’ attitudes and beliefs, class size, class heterogeneity, past experiences and teacher training on teacher self-efficacy.

Thirty-three teachers and 818 students from twelve schools in two metropolitan school boards participated in the study. Teachers completed three measures of attitudes and beliefs and one measure of training and experience. Teachers also completed the Pathognomonic/Interventionist interview. This interview was used as a measure of teachers’ beliefs about their roles and responsibilities for delivering services to at-risk and exceptional students. Students who participated in the study completed the Raven’s Progressive Matrices Test. The results of this test were used as a measure of classroom heterogeneity.

The strongest correlate of teacher self-efficacy was university based teacher training in special education and integration. The measures of attitudes (The REITS and the ATMS) were also significant predictors of self-efficacy. The Pathognomonic/Interventionist Interview, measuring teachers’ beliefs about meeting the needs of exceptional students, was not a predictor of self-efficacy. Class size, academic heterogeneity, past experiences and number of years teaching were also not predictors of self-efficacy.
Acknowledgements

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CHAPTER I

1.1 REVIEW OF RELATED LITERATURE

Professionals associated with regular education and special education have argued for the need for an improved range of service delivery for children with special needs (Phillips & McCullough, 1990; Zins, Curtis, Graten & Ponti, 1988; Gartner & Lipsky, 1987). A suggested solution to this problem is integration. Whereas previously children with both mild and severe disabilities were placed in special education classes, they are now being placed in the regular classroom. Teachers are being presented with the challenge of teaching all students assigned to them regardless of students' diverse levels of ability. Although teachers face this challenge, a survey conducted by Semmell, Abernathy, Butera & Lesar (1991) clearly shows that the majority of teachers are reluctant to assume responsibility for all students. One of the causes of teachers' reluctance may be teachers' sense of self-efficacy (Jordan & Stanovich, 1997; Jordan, Lindsay & Stanovich, 1997; Gibson & Dembo, 1984; Guskey & Passaro, 1994).

Self-efficacy has been defined as expectations between action and outcome (Jordan, Kircaali-Iftar & Diamond, 1992). A teacher's sense of self-efficacy may be affected as a result of dealing with an integrated classroom. Bandura (1981) argued that self-efficacy determines how long a person will persist when faced with challenges. The stronger the perceived self-efficacy the more persistent are one's efforts. If the teacher feels he/she cannot meet the challenges of an integrated setting his/her self-efficacy may be lowered.
Self-efficacy may be affected by aspects of classroom composition such as class size and academic heterogeneity (Smylie, 1988). Teacher training and previous experience in special education and integration may also affect the teacher's sense of self-efficacy (Denham & Michael, 1981; Jordan & Silverman, 1991; Bickel & Bickel, 1986; Smylie, 1988). The research study reported here examines whether class size, academic heterogeneity, teacher training in special education, and the teacher's history of success may be related to a teacher's self-efficacy. It will also examine whether teachers' attitudes and beliefs about integration are correlated with self-efficacy. Figure 1 is a model outlining the assumptions of this study. This model was adapted from a model presented by Stanovich (1994) which was an adapted model of Ajzen's theory of planned behaviour. Stanovich's (1994) model was a representation of the determinants of teaching behaviours that contribute to successful integration. The model used in this study indicates the factors which may affect teacher self-efficacy, namely, training and past experiences, classroom composition and attitudes and beliefs. These factors may either increase or decrease self-efficacy, which will in turn affect teacher change.
Figure 1. Model outlining assumptions of study.
1.2 SELF-EFFICACY THEORY

There is evidence which suggests that teachers' beliefs in their ability to instruct students may account for the individual differences in teacher effectiveness (Gibson & Dembo, 1984). The following review of literature will focus on teachers' sense of self-efficacy and how this may affect student outcome.

Bandura (1981; 1990; 1996) has presented research in the area of self-efficacy. He defines self-efficacy as:

"being concerned with judgements about how well one can organize and execute courses of action required to deal with prospective situations which contain many ambiguous, unpredictable and often stressful elements" (1981, p 200-201).

A teacher's expectations about his/her ability to instruct and meet the needs of all of his/her students has been referred to as a teacher's sense of self-efficacy (Gibson & Dembo, 1984). A great deal of literature focuses on teachers' sense of efficacy and how this may affect student outcomes (Gibson & Dembo, 1984; Jordan, Kircaali-Iftar & Diamond, 1994 & Jordan & Stanovich, 1997). There is also evidence which suggests that teachers' beliefs in their ability to instruct students may account for the individual differences in teacher effectiveness (Gibson & Dembo, 1984).

Bandura (1990) states that if a person has a low perception of his/her self-efficacy he/she will avoid situations which he/she tends to believe exceed his/her capabilities. Similarly those who have a higher perception of their self-efficacy will set higher goals and welcome a challenge. Those with a higher perception of self-efficacy will risk undertaking challenges and failures while those with low self-
Self-Efficacy Theory

Efficacy will not (Bandura, 1990). Bandura (1981) found that people tend to avoid situations which they believe exceed their capabilities and undertake and perform with a great confidence activities which they judge themselves capable of handling.

Gibson & Dembo (1984) developed a questionnaire, The Teacher Efficacy Scale, to measure general efficacy and personal efficacy. The development of the Teacher Efficacy Scale began in a pilot study where 53 sample items were administered to 90 teachers. The initial item pool of 53 items was based on teacher interviews and an analysis of the literature that reported characteristics of teachers identified by previous researchers as having a sense of efficacy (Gibson & Dembo, 1984). The original scale was revised and the revised Teacher Efficacy Scale consists of 30 items. This revised scale was used by Gibson & Dembo (1984) to measure General Efficacy and Self-Efficacy. Personal teaching efficacy was defined as the belief that one has the skills and ability to bring about change (p. 573). General efficacy was interpreted as the belief that any teacher's ability to bring about change is limited by factors external to the teacher (p. 574). The following statements illustrate general and personal efficacy, respectively:

1. When it comes right down to it, a teacher can't do much because most of a student's motivation and performance depends on his or her environment.

2. If I really try hard, I can get through to even the most difficult or unmotivated students. (Gibson & Dembo, 1984, p. 581-582).

Strong agreement with the first statement would be indicative of a high sense of general efficacy. This teacher would most likely refer the child to an outside
Self-Efficacy Theory

resource person, because he/she feels that the child’s outside environment affects performance. Agreement with the second statement is reflective of a teacher who has a strong sense of personal self-efficacy. This teacher is most likely to believe that any child can be taught in the regular classroom. If these teachers encounter difficulty they view these as obstacles to be overcome and not as indicators that the child cannot learn (Gibson & Dembo, 1984). This type of teacher believes that he/she does have the ability to instruct and meet the needs of any student.

Woolfolk & Hoy (1990) used a revised version of Gibson & Dembo’s questionnaire and attained results that closely matched those of Gibson & Dembo. Guskey & Passaro (1994) also completed a study using a revised version of the questionnaire. Seven of the twelve personal efficacy items were randomly selected and reworded to reflect either a teaching internal or personal external orientation. Their results identify two independent efficacy dimensions, internal vs. external. Guskey & Passaro (1994) explain the internal factor as representing perceptions of personal influence, power and impact in teaching and learning situations. The external factor relates to perceptions of the influence, power and impact of elements that lie directly outside the classroom and may be beyond the direct control of teachers (p. 639). These authors also found that Gibson & Dembo (1984) and Woolfolk & Hoy (1990) identified this same distinction, namely, internal vs. external dimension.

Now that self-efficacy has been discussed, the factors which may influence teacher self-efficacy must be examined.
1.3 SELF-EFFICACY, TEACHER TRAINING AND PAST EXPERIENCE

One question to be addressed in this study is whether teachers' self-efficacy is related to their previous training (pre-service and in-service) in special education and to their years of experience with students with disabilities.

The teacher's training may affect his/her self-efficacy (Denham & Michael, 1981). Teachers who feel that their teacher training programs did not prepare them to be effective teachers may exhibit a lower sense of self-efficacy, whereas those teachers who graduated feeling that their training had prepared them to be effective may have a higher sense of self-efficacy (Denham & Michael, 1981).

In-service training is also of importance because it is directly tied to whether such efforts are focussed on teachers being trained in effective classroom process procedures (Bickel & Bickel, 1986; Zins, Curtis, Gradin & Ponti, 1988). Bickel & Bickel (1986) state:

when the effective classroom process research is used to develop training procedures for teachers, teachers can learn the recommended practices, and if they implement the teaching practices...they can affect in a positive way student classroom behaviour and achievement (p. 495).

Past research findings have also suggested that teacher effectiveness is dependant on successful teaching experiences (Bickel & Bickel, 1986; Small, 1987; Silverman & Jordan, 1991). Bandura (1990) states that successes raise efficacy appraisals and repeated failures will lower self-efficacy. A teacher who has experienced success in an integrated setting will probably have a higher sense of self-efficacy than a teacher who experienced failure in the past. Past experience
with special education students and integration and how the teacher deals with these experiences will also affect self-efficacy. If for example, a teacher recovers quickly from a bad experience, their self-efficacy will not be lowered, but may in fact increase (Bandura, 1990).

1.4 SELF-EFFICACY AND TEACHER BELIEFS

The research to be discussed will address whether teachers' self-efficacy is related to their beliefs and attitudes toward students with disabilities or those at risk of needing special intervention. Wilson & Silverman's (1991) research indicated that teachers differ in their attitudes and beliefs about their roles and responsibilities for meeting the needs of exceptional and at-risk pupils. Jordan (1992), Jordan, Kircaali-Iftar, & Diamond (1992) and Jordan & Stanovich (1997) identify two extremes of a continuum of teachers' beliefs about their roles and responsibilities. These are referred to as the "pathognomonic" beliefs perspective and the "interventionist" perspective. Jordan and Stanovich (1997) define the pathognomonic approach as attitudes that are derived from the assumption that the problem lies with the student. With this approach, when a student falls behind in his/her schoolwork, the teacher usually refers the student to an external resource person. The teacher uses the assessment to confirm his/her belief that a problem exists within the child (Jordan, 1992; Jordan and Stanovich, 1997). Examples of pathognomonic behaviours include: no pre-referral activities prior to bringing in the resource teacher, little or no monitoring of students' progress in order to adapt and guide instructional
Self-Efficacy and Teacher Beliefs

interventions, little interactions with the resource teacher and minimal parental contact. Teachers who hold pathognomonic viewpoints feel that heterogeneity of their classrooms has been forced upon them and believe that systematic measures should be developed to reduce such diversity (Stanovich & Jordan, 1998).

The alternative approach is the interventionist approach. This approach sees the student's problem as being a result of the interaction of the student with the environment (Wilson, 1992; Jordan & Stanovich, 1997). The teacher believes that any child can profit from instruction in the regular classroom if instruction is adapted to meet the student's needs. These teachers refer students only after attempting a variety of teaching approaches: they use modifications to accommodate integrated students into the regular classroom, they work cooperatively with resource teachers to solve student problems, and they have regular communication with parents. Teachers who hold interventionist beliefs accept the increasing diversity of today's classrooms (Stanovich & Jordan, 1998).

Jordan et al. (1992, 1997) provide evidence that teachers with a strong sense of efficacy follow the interventionist approach while those teachers with a lower sense of efficacy will adhere to the pathognomonic approach. Teachers with a stronger sense of efficacy will feel more comfortable assuming responsibility and solving problems which special needs students may face, while those teachers who exhibit a lower sense of efficacy may not feel comfortable assuming responsibility for these students (Jordan et al., 1992; Gibson & Dembo, 1984). Gibson & Dembo (1984) argue that teachers who believe that student learning can be influenced by adapting instruction and who have confidence in their teaching capabilities should:
"persist longer, provide a greater academic focus in the classroom, and exhibit different types of feedback than teachers who have lower expectations concerning their ability" (p. 570).

Denham & Michael (1981) found that there is some evidence to suggest that teacher attitudes influence teacher behaviours and that teacher behaviours influence student achievement. They argued that the effective teacher is not simply one who chooses an effective rather than an ineffective behaviour, but is:

a teacher who actively strives to reach goals and continually modifies behaviour in order to do so...a sense of efficacy perhaps is one source of the necessary motivation (p. 48).

1.5 SELF-EFFICACY AND ATTITUDES ABOUT SERVICE DELIVERY AND INCLUSIVE EDUCATION

The shift toward the integration of disabled pupils has resulted in a different service delivery model. Previously, exceptional students were taken out of the classroom and placed in special education classrooms. Today, the emphasis is being placed on teaching exceptional students in the regular classroom. It is teachers' attitudes toward integration and how this may affect teacher self-efficacy that is of interest to this study. Semmel, Abernathy, Butera and Lesar (1991) conducted a survey of 381 special and regular education teachers using the Regular Education Initiative Teacher Survey (REITS) to assess their attitudes, beliefs and perceptions toward two service delivery models: pull-out vs. in-service. Their findings suggest that, as a group, regular classroom teachers were in favour of resource pull-out programs and they were ambivalent about integration. Semmel
et al. (1991) state that placing students with mild disabilities in the regular classroom may not result in success if the teacher's expectations and perceptions of these students is negative.

A significant factor which has lead to an increase in classroom heterogeneity is the inclusion of exceptional pupils in regular classrooms. It is therefore necessary to study teachers’ attitudes towards integration and how this may affect self-efficacy. Berryman & Berryman (1981) have developed the Attitude Towards Mainstreaming Scale (ATMS) as a measure of attitudes towards mainstreaming. Their study found that in general, teachers are in favour of mainstreaming, exclusive of students who exhibit disruptive behaviour. The question remains: are teachers' beliefs and attitudes toward integrating exceptional and at-risk pupils related to their sense of self-efficacy? The ATMS & the REITS will be used in the study to measure teachers’ attitudes and beliefs about integration and how this may affect self-efficacy.

1.6 SELF-EFFICACY AND CLASSROOM COMPOSITION

Characteristics which may affect the teacher's self-efficacy may not necessarily be qualities solely of the teacher, but may include environmental conditions surrounding the teacher such as class size and academic heterogeneity. Smylie (1988) has stated that an increase in class size and academic heterogeneity result in an increase in classroom complexity. This may cause the teacher's expectations about his/her ability to meet the needs of students to be reduced.
"Classroom complexity may limit the extent to which teachers may believe that they can affect the learning of all students in the class" (Smylie, 1988, p.7).

1.6.1 **Self-Efficacy & Classroom Heterogeneity**

Teachers are being faced with the task of meeting the needs of an increasingly diverse group of learners. Classes are no longer homogeneous, but have now become heterogeneous. McLaughlin et al. (1986) found that class size is less important than class composition, with respect to teacher effectiveness. While it may be difficult to effectively reach a large group of students, it is especially challenging when this is compounded by students who function at a wide range of academic levels. Teachers may experience a deep sense of failure when they feel that youngsters are not grasping what is being taught in the classroom (McLaughlin et al, 1986). As stated previously, a teacher's history of success or failure may affect his/her self-efficacy. A deep sense of failure and the resultant lack of self-efficacy may further negatively affect the teacher's future performance when faced with challenging situations.

In classrooms with academically diverse student groups, many teachers choose to work in a large group rather than a small group instructional format. Smylie (1988), however, states that large group instruction may be chosen over small group instruction perhaps because teachers believe they can closely supervise student behaviours (i.e. exert behavioural control) in this environment. Class size and academic heterogeneity may combine to cause the teacher to experience a sense of dissatisfaction in their inability to reach students effectively.
1.6.2. Self-Efficacy and Class Size

Further factors which may influence teachers' sense of self-efficacy are class size and instructional grouping. Smylie (1988) states that classroom environment may influence the development of the teacher's self-efficacy. Large classes restrict the manner in which teachers may interact with students. Due to the large number of students in a class, teachers cannot spend as much time supervising the student's on-task behaviour as in a small class, therefore teachers may have difficulty managing their time during the day. Class size may have an impact on a teacher's sense of efficacy because if the class is large, the opportunity for the teacher to work individually with students is reduced. Teachers may feel a sense of inadequacy if they are not able to meet the individual needs of all students.

If the class size is large, it may be difficult for the teacher to follow effective instructional techniques. Bickel and Bickel (1986) found that effective teachers take an active role in the instruction of their students. These same teachers search for an understanding of instruction by using techniques such as questioning and consistent checking of homework, and they always review the previous day's work before continuing to the next lesson (Bickel & Bickel, 1986; Englert, Tarrant & Mariage, 1992). Effective teachers maintain a brisk pace with a high success rate during teacher-led instruction. Effective teachers also continually monitor progress to ensure that the child is grasping what is being taught (Englert et. al., 1992). It may be difficult to follow effective instructional techniques in large classes, simply because the teacher has little time to devote to the different student profiles. This may cause the teacher to feel as though he/she is not meeting the needs of all
Self-Efficacy and Classroom Composition

students in the class, thus causing his or her self-efficacy to be lowered.

Smaller classes may influence the teaching/learning process in positive ways. The self-efficacy of the teachers is not only increased, but the student's sense of self-efficacy may also increase in smaller classes. In smaller classes, teachers are better able to work individually with students and address more individual needs. Teachers reported that they were more productive and efficient in the smaller classes than they had been while teaching larger classes (Bain & Achilles, 1986). Students' academic ability may be improved in smaller classes. Teachers agreed that:

smaller classes were quieter, therefore there were fewer student interruptions;

disciplinary problems could be identified and dealt with quickly; and

teachers had more time to monitor the students' on-task behaviour during instruction and they were able to provide quicker and thorough feedback to students, to re-teach concepts and to provide in-depth instruction. (Bains & Achilles, 1986, p. 664)

Jordan, Lindsay & Stanovich (1997) found that teachers who viewed themselves as instrumental in inclusion spent more time on academic as compared to non-academic instruction. In contrast to other teachers, they also spent more time with at-risk and exceptional students and at higher levels of cognitive extension. Swank, Taylor, Brady and Freiberg (1989) found that the most effective teachers were those who:

"spent more time in interactive instruction, less time in organizing and managing, more time on-task, and had students who were more involved in interactive
Their study also found that those teachers who spent less time asking academic questions, but more time providing academic information, correcting students and providing negative feedback were those who were least effective (Swank et al., 1989). Are these teachers less effective because of the class size and/or the academic heterogeneity of the class? If the class is large and diverse, teachers may feel that they do not have enough time to spend on asking a wide range of academic questions to address the different learners' needs, and therefore, will spend the time on simply providing information.

McLaughlin et al. (1986) asked teachers what they would change in order to become more effective. The teachers most often reported that a decrease in class size and academic heterogeneity would offer them a greater opportunity to be more effective.

1.7 SUMMARY

The literature appears to indicate that a teacher's self-efficacy may be influenced by teacher training in special education and past experiences with integration and special needs students. Conditions such as class size and academic heterogeneity may also affect self-efficacy. When these elements combine, they may cause a teacher's sense of self-efficacy to diminish. The teacher may be left with a feeling of dissatisfaction of not being able to meet the needs of all students in the class, thus self-efficacy will be lowered. Conversely, as Gibson & Dembo (1984) have stated:
teachers with a stronger sense of self-efficacy will persist longer, provide a greater academic focus in the classroom, exhibit different types of feedback than teachers who have lower expectations concerning their ability (p. 570).

A strong sense of self-efficacy may be the necessary source for motivating teachers to strive to reach goals and continually modify their beliefs, attitudes and behaviour in order to deal effectively with integration. Teachers with a stronger sense of self-efficacy will expend a greater effort to master the challenge of dealing with exceptional and at-risk pupils. Teachers' judgment of their self-efficacy will affect the choice of activities for dealing with the diversity of today's classrooms (Bandura, 1981). The more effective teachers judge themselves to be, the wider the range of options they will consider. These teachers will not automatically refer a child to the resource teacher, but will consider all the options that they may use to effectively deal with the student. We can now begin to examine whether teachers' attitudes and beliefs, class size and academic heterogeneity, teacher training and past experiences do affect teacher self-efficacy.
CHAPTER II

2.1 RESEARCH QUESTIONS

Teachers' sense of self-efficacy has been defined as the teacher's expectations about their own ability to instruct and meet the needs of their students (Gibson & Dembo, 1984). The research conducted for this study will address the following questions:

1. Is a teacher's sense of self-efficacy related to:
   (a) Teacher Training (pre-service and in-service) in Special Education
   (b) Previous Teaching Experiences
   (c) Class Size
   (d) Academic Heterogeneity

2. Are teachers' attitudes towards integrating exceptional and at-risk pupils as measured by the ATMS and the REITS, related to their views of their own teaching effectiveness?

3. Are teachers' beliefs about their roles and responsibilities for meeting the needs of exceptional and at-risk pupils, as measured by the P-I interview related to their self-efficacy?

2.2 RESEARCH METHODOLOGY

2.2.1 Teachers

There were thirty-three teachers involved in this study. Teachers were volunteers from twelve different schools in two school systems in the greater
Metropolitan Toronto area and surrounding regions. Grade levels ranged from grade two through to grade eight with eight of the classes being split grades and 25 of the classes being non-split grade classrooms. Of the thirty-three teachers, twenty-six were females and seven were males. Table 1 sets out the distribution of teachers by grade and sex. Teacher experience ranged from one year to thirty years of teaching. Twenty-three of the teachers had no special education training and ten of the teachers had taken training in special education ranging from inservice courses to Master's degrees. Each teacher volunteered to participate in the study following a presentation by the researcher in each school. Each signed a consent form which highlighted anonymity, confidentiality and the option to withdraw at any point without consequence.

Table 1. Distribution of Teachers by Grade and Sex.

<table>
<thead>
<tr>
<th>GRADE</th>
<th>MALES</th>
<th>FEMALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
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<tr>
<td>3/4</td>
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<td>2</td>
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<td>4</td>
<td>0</td>
<td>7</td>
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<td>4/5</td>
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<td>1</td>
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<td>5</td>
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<td>2</td>
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<td>5/6</td>
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<td>3</td>
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<td>6</td>
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<td>7</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>7/8</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
2.2.2 Pupils

Children who participated in the study were between the ages of eight and eleven and of diverse cultural backgrounds and diverse levels of ability, including students who were identified as exceptional and integrated into the regular classroom. Of the 818 pupils, ninety-four were identified as exceptional, seventy-four were identified as having English as a second language, one hundred and ten of the pupils were identified as at-risk for school failure and fifty-five were considered gifted. Table 2 is a breakdown of the exceptionalities identified by the teachers using the terms required by the Ontario Ministry of Education and Training (1984). The class sizes ranged from twenty to thirty-seven students and was determined at the beginning of the project from class lists.

Table 2. Number of Students by Exceptionality.

<table>
<thead>
<tr>
<th>EXCEPTIONALITY</th>
<th>NUMBER IDENTIFIED</th>
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<tbody>
<tr>
<td>LEARNING DISABLED</td>
<td>45</td>
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<tr>
<td>LANGUAGE</td>
<td>1</td>
</tr>
<tr>
<td>HEARING IMPAIRED</td>
<td>2</td>
</tr>
<tr>
<td>MR</td>
<td>11</td>
</tr>
<tr>
<td>GIFTED</td>
<td>20</td>
</tr>
<tr>
<td>MULTI-HANDICAPPED</td>
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</tr>
<tr>
<td>BEHAVIOURAL</td>
<td>6</td>
</tr>
<tr>
<td>AUTISTIC</td>
<td>4</td>
</tr>
<tr>
<td>ENGLISH AS A SECOND LANGUAGE</td>
<td>74</td>
</tr>
<tr>
<td>AT-RISK FOR SCHOOL FAILURE</td>
<td>110</td>
</tr>
<tr>
<td>GIFTED</td>
<td>55</td>
</tr>
</tbody>
</table>
2.3 TASKS AND MEASURES

2.3.1 Teacher Efficacy Scale

Teachers were asked to complete the Teacher Efficacy Scale, a revised version of Gibson & Dembo's (1984) questionnaire modified by Johnston (1992) and utilized by Kircaali-Iftar (1992) (see Appendix A). It provides an indication of the teacher's expectations about his/her abilities to meet the needs of his/her students. The questionnaire consists of 38 items. Teachers were asked to rate each of the statements on a 6 point scale:

1. Strongly disagree
2. Moderately disagree
3. Disagree slightly more than agree
4. Agree slightly more than disagree
5. Moderately agree
6. Strongly agree

Half of the items on the scale relate to a factor that Gibson and Dembo call Personal Teaching Efficacy, the respondent's teaching self-efficacy. A question which addresses the teacher's expectations about her/his ability to meet the needs of the students would be: "If I try really hard, I can get through to even the most difficult behavioural problem students" (Item #18). The remaining items relate to a factor called General Efficacy. This measures the degree to which the teacher feels the home environment interferes with teacher efficacy. For example, "With some students their learning potential is established before they even come to school"
For the purposes of the present study, only the 19 items related to Personal Teaching Efficacy were used in the analysis. The total score is derived by summing the scores on the individual items. Higher scores indicate higher perceived self-efficacy. The split-half reliability (Spearman Brown corrected) was .88 and Cronbach's alpha was .82.

2.3.2 Teacher Training and Past Experiences Questionnaire

A questionnaire was developed to assess teacher training in special education and past experiences with exceptional and at-risk pupils (see Appendix B). The final draft of the questionnaire was reviewed by two senior researchers and changes were made accordingly. The questionnaire consisted of six questions. Four of the questions used a scale of one to five, one signifying no use at all and five signifying very useful. Teachers were asked to rate the usefulness of their pre-service training in preparing them to deal with integration. They were also asked to rate the usefulness of their in-service training, both at the school board level and at the university level, in preparing them to deal with integration. Teachers were asked if they had any prior experience teaching exceptional students in an integrated setting, requiring a yes or no answer. They were asked to rate how successful they were in teaching in an integrated setting. The scale was from one to five, one being not successful at all and five being very successful. This question was separated into two categories - teaching in an integrated setting for a full day or only part of the day. The rating on these two questions was then combined and treated as one question.
2.3.3. Class Size and Academic Heterogeneity

Data for the Raven’s Test were collected from 818 of 883 pupils enrolled in the teacher participants’ classrooms. This test was used as an index of the degree of academic diversity in the class. This is a test of a person’s capacity, at the time of the test, to comprehend patterns in geometric figures, with the overall intention being to develop a method of reasoning (Raven, 1977). The test consists of sixty problems divided into five sets of twelve. In each set, the difficulty of the items increases from the earlier items. For this particular project, only two of the five sets of problems were used because of time restrictions and the large sample size (see Appendix C). Raven (1977) states that young children and learning disabled children are not expected to solve more than the problems in two of the sets of problems. Cahan and Cohen (1989) administered the test using only two sections and received valid results in a previous study. Based on their findings, and because of time restraints only sections C and D of the test were used for this study.

A protocol for administering the test was developed so that the test was delivered in the same manner to each of the various classes. The first two questions served as examples. Students were then given twenty minutes to complete the remainder of the test. The test was administered individually to some students. For example, those students who were not able to write the answer and needed to verbally dictate their answer. In this case, the person administering the test circled the answer which the student selected. The test was then scored by adding up the number of correct answers for each student. The standard deviation for each class was used as a measure of variance of academic heterogeneity.
2.3.4 The Attitude Toward Mainstreaming Scale (ATMS)

This questionnaire was developed by Berryman (1988) (see Appendix D). The ATMS consists of 18 statements and requires teachers to rate their opinion about integrating students who are designated as belonging to one of seventeen categories of exceptionalities. The Likert-type scale ranges from one to six with one denoting strong disagreement and six denoting strong agreement. The statements concern the desirability and feasibility of teaching disabled students in the regular classroom. The questionnaire begins with general questions regarding mainstreaming. As the questionnaire progresses, the questions become more specific asking the teacher about specific exceptionalities and whether or not these students should be integrated. The ratings on each question were added to obtain a final score for the questionnaire. A higher score represented a more positive attitude towards mainstreaming of exceptional students. The split-half reliability (Spearman-Brown corrected) was .96 and Cronbach's alpha was .93.

2.3.5 Regular Education Initiative Teacher Survey (REITS)

All teacher participants completed the Regular Education Initiative Teacher Survey (REITS). This survey was developed by Semmel et al. (1991). It consists of twenty-seven items and its purpose is to assess teachers' values, beliefs and perceptions about special education teacher resource services (see Appendix E). Some of the items are worded positively toward integration. For example, “Regular class teachers have the instructional skills to teach both mildly handicapped and
Tasks and Measures 25

regular students". Other items are reversed scored. For example: “Regular class teachers cannot meet the academic needs of mildly handicapped students currently in their classrooms. Services may include withdrawal programs and resource allocation. The questionnaire was modified for Ontario terminology (Johnston, 1991). Teachers were asked to either agree or disagree with each statement. Items were scored on a scale of 1 or 0, one being a positive attitude toward mainstreaming. The total score was the sum of all 27 items. The split-half reliability of the scale (Spearman-Brown corrected) was .82 and Cronbach’s alpha was .82.

2.3.6 Pathognomonic/Interventionist Interview (P/I Interview)

Each of the 33 classroom teachers were interviewed using the Pathognomonic/Interventionist interview rating and scoring scale developed by Jordan-Wilson and Silverman (1991) and Jordan et al. (1993) (Appendix F). This interview is designed to measure teachers’ beliefs as to their roles and responsibilities to exceptional students. The interview covers five topical areas:

1. **Referral and Assessment**: What were the steps taken when a child was identified as at-risk?

2. **Programming**: What were the teacher’s goals and objectives and what adaptations to programs were undertaken for the at-risk and identified children in the classroom?

3. **Review**: How does the teacher deal with the in-school team and how does the teacher monitor the student’s progress?
4. **Communication with staff**: Do teachers work together to help the at-risk and identified students? For example, how do the teachers collaborate with the special education teacher or the resource staff?

5. **Communication with Parents**: Does the teacher keep the parents informed about and involved with decisions about the student's progress? Are parents contacted before major problems occur?

Teachers were asked to identify any students for which they had a concern. The interviewer asked the teachers to explain the steps which were taken when the child first came to their attention. Teachers were also asked about one or more identified students in the class and their perceived role in relation to these children. The interviews were tape recorded and later transcribed for scoring using the Teacher Interview Rating Criteria (Appendix G). Answers were scored on a scale of one to three, one being pathognomonic and three being interventionist. The total of each area was added to obtain the final score on the interview. A low score represented a pathognomonic attitude and a higher score represented an interventionist attitude. Replicating the findings of Jordan-Wilson & Silverman (1991), there was a large common factor running through the items. An estimate of internal consistency (Cronbach’s alpha) was .89 and the mean correlation between the components of the scale was .53. Because of the commonality in the items of the scale, the summed score of all 20 items was used in the analysis.
2.4 PROCEDURE

Teachers for this study were selected from two different Catholic school boards in the greater Toronto area.

The project was explained and all interested principals were asked to attend an information meeting which was held at their schools. Meetings were subsequently scheduled at each school where the project was explained to all teachers from Grades 2-8. Teachers were asked to volunteer 1.5 hours for the interview and classroom measures and 3 one-hour sessions for classroom observation (this was later changed to 1.5 hours of observation). Interested teachers signed consent forms and were contacted later to arrange for interview times. Parental consent forms were given to teachers to distribute to students. A telephone number was provided for parents who wanted more information about the project.

Teachers were interviewed, in a quiet location in the school away from their classrooms, using the Pathognomonic/Interventionist Interview developed by Jordan et al. (1992). The interview lasted approximately 45 minutes while the remainder of the time was given for teachers to complete the various questionnaires. While teachers were being interviewed, the Raven's test was distributed to the students. Children whose parents did not wish for them to participate in the study were given different tasks to complete during the testing time and were not included in the data set. The classes were supervised by members of the project team who were qualified teachers. In order for all information to be kept confidential, students were asked to complete an
identification paper with their name, school and teacher's name. When the questionnaires were completed, the identification sheet was removed and each student was assigned a number. The same procedure was used for teachers.
CHAPTER III

3.1 RESULTS

The analysis of data examines whether or not a correlation exists between the dependant and independant variables. The dependant variable in this study was teacher self-efficacy. The study examined each of the independant variables, namely, class size, teacher training, past experiences in special education, academic heterogeneity and attitudes and beliefs, and how each of these variables may affect teacher self-efficacy.

Table 3 sets out the means and standard deviation scores for each of the variables. The average number of students per class was 26.8, with a range of twenty to thirty seven students per class. For the teachers, the average number of years of teaching was 10.3, with a range of one to thirty years of teaching experience. On a rating scale of 1 - 5, where one signified “no use at all” and five signified “very useful”, in-service training had the highest mean score (average = 3.00) and standard deviation of 1.41. On a rating scale of 1 - 5, one being not successful and five being very successful, teachers’ rating of their success in dealing with an integrated classroom had a mean score of 3.79 and a standard deviation of .98. These scores would indicate that most teachers generally believed themselves to have been successful in dealing with an integrated classroom.

Table 4 displays the correlations between the variables teacher efficacy, teacher attitudes and beliefs, training, past experience and classroom composition.
### Results

#### Table 3. Descriptive Statistics.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
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<td><strong>Teacher Attitudes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATMS</td>
<td>33</td>
<td>37.00</td>
<td>108.00</td>
<td>86.80</td>
<td>15.90</td>
</tr>
<tr>
<td>REITS</td>
<td>33</td>
<td>36.00</td>
<td>46.15</td>
<td>46.15</td>
<td>4.58</td>
</tr>
<tr>
<td><strong>Teacher Beliefs</strong></td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>P/I Interview</td>
<td>33</td>
<td>1.20</td>
<td>3.00</td>
<td>2.35</td>
<td>.44</td>
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<td>Teacher Efficacy</td>
<td>33</td>
<td>70.00</td>
<td>109.00</td>
<td>4.73</td>
<td>.53</td>
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<td><strong>Demographics</strong></td>
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<tr>
<td>Years Teaching</td>
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<td>30</td>
<td>10.33</td>
<td>7.98</td>
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<tr>
<td>Class Size</td>
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<td>26.76</td>
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<td><strong>Teacher Training</strong></td>
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<tr>
<td>Pre-Service Training</td>
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<td>1.00</td>
<td>5.00</td>
<td>2.43</td>
<td>1.33</td>
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<td>In-Service Training (School Board)</td>
<td>25</td>
<td>1.00</td>
<td>5.00</td>
<td>2.46</td>
<td>.99</td>
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<td>In-Service Training (University)</td>
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<td>1.00</td>
<td>5.00</td>
<td>3.00</td>
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<td><strong>Teacher Self-Ratings</strong></td>
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<tr>
<td>Previous success with integration</td>
<td>19</td>
<td>1.00</td>
<td>5.00</td>
<td>3.79</td>
<td>.98</td>
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Table 4. Correlations between the attitudinal, beliefs, efficacy, demographics and self-rating scores of the teachers.

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<th>Variables</th>
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<td>1. ATMS</td>
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<td>Teacher Beliefs</td>
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<td>3. P/I Interview</td>
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<td>4. Teacher Efficacy</td>
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<td>Demographics</td>
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<td>5. Yrs. Teaching</td>
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<tr>
<td>6. Pre-Service Training</td>
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<td>.07</td>
<td>.22</td>
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<td>7. In-Service Training (School Board)</td>
<td>.28</td>
<td>.30</td>
<td>.29</td>
<td>.27</td>
<td>.25</td>
<td>.70**</td>
<td></td>
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<tr>
<td>8. In-Service Training (University)</td>
<td>.32</td>
<td>.13</td>
<td>-.12</td>
<td>.53*</td>
<td>.06</td>
<td>.57**</td>
<td>.48*</td>
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<td>Teacher Self-ratings</td>
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<td>9. Past Experience</td>
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<td>.51*</td>
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<td>10. Self-rating (success)</td>
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<td>.59*</td>
<td>.90**</td>
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<td>11. Class Size</td>
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<td>.05</td>
<td>-.13</td>
<td>-.14</td>
<td>.34</td>
<td>.31</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01

3.2 TEACHER TRAINING, PAST EXPERIENCES AND SELF-EFFICACY

It was hypothesized that teacher training and past experiences with exceptional and at-risk pupils may affect a teacher's sense of self-efficacy. In-service training provided by university courses positively correlated with self-efficacy (r=.53; p<.05). Teachers' past experiences with integration and self-efficacy failed to reach significance. Self-efficacy increases as in-service training increases.
Teacher Training, Past Experiences...

Although past experiences dealing with integration did not correlate with self-efficacy, the results indicate that there was a positive correlation between past experiences and teachers’ self-rating of success in dealing with integrated classrooms ($r=.90; \ p<.01$). As past experience with special needs students increases, teachers’ self-rating of success in dealing with integration also increases.

While in-service training provided by university courses was found to have significant correlation with self-efficacy ($r = .53; \ p<.05$), in-service training provided by school boards did not significantly correlate with self-efficacy. The results also indicate that the correlation between pre-service training and self-efficacy was not significant. Pre-service training did, however, correlate with both in-service training provided by university courses ($r = .55; \ p<.01$) as well as training provided by the school boards ($r = .69; \ p<.01$).

Teachers rated similarly the usefulness of in-service training provided by university courses and in-service training provided by the school board ($r = .69; \ p<.01$). In-service training provided by university courses had a significantly positive correlation with past teaching experiences in an integrated setting ($r = .51; \ p<.01$).

Teachers’ rating of their success at teaching in an integrated setting correlated significantly with in-service training provided by the school board ($r = .48; \ p<.05$), in-service training provided by university courses ($r = .59; \ p<.05$) and with number of years teaching ($r = .88; \ p<.05$). This implies that self-ratings of success will increase as the number of years of teaching experience increases. Similarly, the more in-service training a teacher has received, the more positive their self-ratings of success.
3.3 **CLASS SIZE, ACADEMIC HETEROGENEITY AND SELF-EFFICACY**

It was hypothesized that the larger the class the lower the teacher's self-efficacy. Academic heterogeneity, as measured by the variance of the Raven's Progressive Matrices was also predicted to correlate with teacher self-efficacy. The correlation for class size with self-efficacy and academic heterogeneity with self-efficacy failed to reach significance.

There was a positive correlation ($r = .43; p < .05$) between class size and in-service training provided by the school board. There was also a significant positive correlation between class size and teachers' past experience with integrated classrooms ($r = .39; p < .05$).

3.4 **MEASURES OF ATTITUDES, BELIEFS AND SELF-EFFICACY**

There were two items used to measure teacher attitudes towards integrating exceptional and at-risk students into the regular classroom, namely, the REITS and the ATMS, and one measure of beliefs, the Pathognomonic/Interventionist (P/I) Interview.

Teacher efficacy is correlated with both paper and pencil measures of attitudes and beliefs toward mainstreaming. About 18% of the variance is predicted by the relationship between the ATMS and teacher self-efficacy ($r = .43, p < .05$). One can say that there is a relationship between attitudes towards integration and self-efficacy.

The REITS was also used as a measure of attitudes. The score on this
questionnaire was correlated with self-efficacy and a value of .36 was obtained. There was a significant correlation ($r = .36; p < .05$) between self-efficacy and teacher attitudes about integration. In general, the higher the teachers’ self-efficacy, the more comfortable they will be about integrating exceptional students into the regular classroom.

The P/I interview developed by Jordan et al. was used as a third measure of attitudes and beliefs. The P/I interview, unlike the ATMS and the REITS, was not significantly correlated with self-efficacy.
CHAPTER IV

4.1 DISCUSSION

The following discussion will highlight significant correlations of the data set at p<.05 or lower.

4.1.1 Teacher Training in Special Education & Self-Efficacy

One hypothesis stated that teacher training in special education and integration would be positively correlated with self-efficacy. Past research has found that effective teachers have more extensive professional preparation, including more practicum experience in their training programs (Sindelar et al., 1990; Denham & Michael, 1981). Through training, teachers acquire strategies to deal with challenging situations. Once in practice, teachers expand their knowledge base by enrolling in professional development courses provided by both the school board and university courses.

In this study in-service training provided by university courses showed a significant positive correlation of $r=.53$ (p<.05), indicating that teacher training, provided by university courses, is positively related to self-efficacy. Sindelar et al. (1990) cite studies which show that effective teachers have more extensive professional preparation, including more practicum experience in their training programs and more post-graduate work. It may also be that teachers with a higher sense of self-efficacy enroll in courses in order to expand their knowledge base and as a result are better prepared for any challenge which they may encounter (Bandura, 1990). Those teachers who enroll in university courses in the areas of
special education and integration, most likely feel better equipped to deal with teaching in an integrated setting, thus, increasing their level of self-efficacy. Similarly, one must not overlook the fact that it is perhaps the most effective teachers who continuously strive to improve their knowledge and resources to assist them in the classroom. Bandura (1990) states that the more efficacious people judge themselves to be, the better they prepare themselves educationally for different occupational pursuits. If one applies Bandura’s theory to teacher self-efficacy, it may be that effective teachers go beyond the training provided by their pre-service years and the school boards. Teachers who have augmented their skills with in-service training, which they found to be useful, may have more confidence in their teaching ability and therefore will have a positive effect on student learning. Conversely, if a teacher feels they have not received appropriate training, we cannot expect these same teachers to believe they can be successful in meeting the needs of exceptional and at-risk pupils. Alternatively, if they have low self-efficacy they may be predisposed to reject training opportunities.

Although university-based in-service training was a positive predictor of self-efficacy for this sample, pre-service training was not. University additional qualification courses are usually longer and more detailed than pre-service courses. Pre-service courses tend to be survey-type courses. In most cases, pre-service practicum experience is too short and fragmented to provide valuable learning opportunities. Teachers do not feel that they are receiving adequate preparation in their pre-service teacher training programs to deal with special education issues (Sachs, 1990). Teachers who just graduate from faculties of education may have
a lower sense of self-efficacy than more experienced teachers because they feel they have not been properly trained to deal with integration, and they do not feel confident in their ability to meet the needs of all students in the class, especially special needs students. Benz et al. (1992) compared entry and exit level teacher education students with experienced teachers and found that more experienced teachers clearly demonstrate higher self-efficacy. Pre-service teachers possess neither the knowledge base nor the experience, and thus may have lower self-efficacy.

There was also no significant relationship found between in-service training provided by school boards and self-efficacy. There are a number of possible explanations for this. While one might think that the training provided by school boards may be based most closely on the reality which a teacher faces from day to day, this may not be the case. Moreover, there may simply be a lack of attention to training in integration and special education in these school boards. Whatever the reason, in this sample, in-service training provided by school boards was not an important factor in affecting teacher self-efficacy.

4.1.2 Teachers' Self-rating of Success and Self-Efficacy

Teachers' self-rating of success and self-efficacy failed to reach significance. The literature (Bandura, 1988, 1990; Denham and Michael, 1981) seems to support the theory that successes and failures will either increase or decrease teacher self-efficacy. It was surprising that this study found no evidence for or against the relationship between these two variables. If teachers are saying that they have
been successful, why did this not affect their self-efficacy? In effect, what teachers are saying is that they have dealt with previous situations rather successfully (thus high self-rating), yet this does not necessarily predict that they feel confident about dealing with future situations. It is necessary to conduct further research in this area in order to closely examine the relationship between self-ratings of success and teacher self-efficacy.

In the sections that follow, you will see that certain factors correlated with teachers' self-rating of success, but these same variables did not correlate with teacher self-efficacy.

### 4.1.3 Teachers' Self-rating of Success and In-service Training

In-service training provided by school boards correlated significantly with teachers' rating of their success with integrating exceptional and at-risk pupils ($n=19; r=.48; p<.05$) as well as in-service training provided by university courses ($r=.59; p<.05$). As stated above, teachers who receive training in the area of special education and integration may feel that they have greater knowledge of the topic (i.e. integration). These teachers draw on this special knowledge and may in fact be more competent in dealing with these situations, thereby increasing their self-ratings of success.
4.1.4 Teachers’ Self-rating of Success and Past Experiences with Integration

One of the most significant findings of this study was that of teachers’ self-rating of their past success at integrating exceptional and at-risk pupils into the regular classroom. For this study, teachers were asked to rate how successful they were with integrating exceptional and at-risk pupils into the regular classroom. Self-ratings of success in integrating students correlated strongly with past experience teaching special education or teaching in an integrated setting (r=.90; p<.01).

As past experiences with exceptional students increase, teachers’ rating of their success with integration is hypothesized to increase. According to Denham and Michael (1981), how past experience will affect teacher behaviour is dependant on (a) success of the teacher in achieving sustained periods of learning in the classroom, and (b) the stage in a teacher’s career at which success and failures are experienced. If teachers have past experiences with integration and these experiences have helped bring about a change in a student, then these teachers’ rating of success will be higher than teachers who have not had many experiences with special education or integration. The teacher who views themselves as having been successful in the past may see him or herself as being an effective teacher capable of meeting the needs of all future students. However, if in the past a teacher has failed when faced with students of diverse levels of ability, this teacher may take this one failure as an indication of his/her inability to meet the needs of subsequent students. This teacher’s self-rating of success will be lower.
4.1.5 Self-Ratings of Success and Number of Years teaching

This study found that the number of years teaching is correlated with a teacher's self-rating of success with integration and special education (r=.46; \( p<.05 \)). Self-ratings of success will increase as the number of years teaching increases. It may take numerous years of teaching and experimenting with different approaches before teachers develop a confidence in their instructional ability (Stanovich & Jordan, in preparation). The teacher with many years of teaching experience will have had an opportunity to adjust their teaching practices depending on what works well with which students. Teachers who have only one year of teaching experience may still feel unsure of themselves because they have not had an opportunity to adjust their teaching practices. They may not feel comfortable in an integrated setting because they have not yet acquired the skills developed by more experienced teachers, and therefore, their self-ratings of success with integrating exceptional and at-risk pupils may be lower.

4.1.6 Past Experience, Number of Years Teaching & Self-Efficacy

It was hypothesized that past experiences with integration and the number of years teaching would affect teacher self-efficacy. This study failed to find a significant relationship between these two variables giving no evidence for or against the effects of past experiences and number of years teaching on self-efficacy. Further research is warranted in this area.
4.1.7 Classroom Composition & Self-Efficacy

It was hypothesized that the school environment can also affect a teacher's level of self-efficacy. Smylie (1988) found that "classroom complexity may limit the extent to which teachers may believe they can affect the learning of all students in the class" (p.7). The two components of the class environment examined in this study were academic heterogeneity and class size. The results of this study indicate that there was no significant relationship between class size and self-efficacy. It was hypothesized that the larger the class, the lower the teacher's self-efficacy, because teachers may feel that they are unable to meet the needs of all students in the class. This particular study found no significant relationship between these two variables, giving no evidence for or against the effects of class size on self-efficacy. Further research on class size and teacher self-efficacy may be necessary. Note that in a subsequent study (Roach, in preparation), efficacy and class size did not correlate, but efficacy and number of exceptional students was significantly inversely correlated.

Class size was significantly correlated with in-service training provided by the school board (r=.42; p<.05). In-service training provided by the school boards may provide teachers with supports to effective teaching. Bickel & Bickel (1986) found that in order to support effective instruction in classes, schools must develop sound staff development via in-service training. School-board training must focus on effective teaching in large classes. Teachers must be taught how to keep students on-task and how to implement interactive instruction.

Class size and past experience had a significant positive correlation. Class
size may be in part a function of the decision to assign larger classes to those teachers who are viewed as more experienced and effective teachers. These teachers may be viewed as more capable of dealing with the challenges presented by larger classes. Teachers with more experience in dealing with integrated classes, may be given the challenge of dealing with larger and diverse classes. It may be assumed by the schools that if a teacher has past experience dealing with larger classes, they will be able to persist longer and cope better when faced with the challenge of dealing with large number of students in the class.

McLaughlin et al. (1986) found that class size is less important than class composition. It is difficult to reach a large group of students, but the difficulty is increased when the large group consists of students who function at a wide range of academic levels. One would assume that academic heterogeneity will cause self-efficacy to be lowered. In this particular study, there was no significant relationship between academic heterogeneity and self-efficacy as measured by the variance of scores, in each class, for the Raven’s Progressive Matrices and scores on the teachers’ Teacher Efficacy Survey scale. Smylie’s model (1988) predicted direct negative effects of class size and classroom academic heterogeneity on personal teaching efficacy. Further study in this area and a closer examination of these two variables as they relate to self-efficacy is warranted. Although the findings of this study failed to show the effects of class size on self-efficacy, the relationship may be more complex than the study was able to demonstrate. The degree of diversity and the number of exceptional students may be factors affecting self-efficacy and therefore further research is needed.
4.1.8 Teacher Beliefs and Attitudes & Self-Efficacy

With respect to teacher beliefs and attitudes the following questions were asked:

1. Are teachers' attitudes toward integrating exceptional pupils related to their views of their own teaching effectiveness, as measured by the REITS and the ATMS?

2. Are teachers' beliefs about their roles and responsibilities for meeting the needs of exceptional students and at-risk pupils related to their teaching self-efficacy, as measured by the P/I Interview?

In relation to question 1, the results of the study showed that there was a positive correlation between attitudes and self-efficacy. For question 2, there was no significant relationship between self-efficacy and teachers' beliefs about their roles and responsibilities, as measured by the P/I scores, for meeting the needs of exceptional and at-risk pupils. Since each of the three tools used (REITS, ATMS and the P/I interview) were measuring the same variables, attitudes and beliefs, one must discern why only two of the three measures (the REITS & the ATMS) correlated positively with self-efficacy.

Jordan and colleagues (1990, 1994, 1997) have developed the P/I interview as a measure of teachers' beliefs about their roles and responsibilities in working with exceptional and at-risk pupils. Pathognomonic beliefs are derived from the assumption that the problem lies with the student. Teachers who hold these beliefs usually have lower self-efficacy (Jordan, Kircaali-Iftar & Diamond, 1992; Jordan & Stanovich, 1994, 1997). At the other end of the continuum are those teachers who
hold beliefs labelled interventionist. These teachers generally exhibit higher levels of self-efficacy. They believe the learning problems arise from interaction between the pupil and the instructional environment for which they have responsibility.

The REITS and the ATMS are both used to measure a person's attitude and beliefs about integration. The respondent is asked to rate each of the statements on a five point Likert-type scale. No further explanation is required with regards to the person's attitude or belief. The P/I interview, however, goes beyond a simple rating scale. This interview requires the interviewee to identify students they consider to be at-risk or exceptional. They are then asked to provide an account of their work with the student, from which the researcher derives a rating of beliefs and attitudes. The interview is a measure of grounded beliefs. That is, teachers describe their experience with specific students who they nominate. Attitudes and beliefs are inferred by the researcher from the teachers' descriptions of the decisions and actions regarding each student. This contrasts with a more traditional rating of beliefs by the participants. It is therefore, more than just a measure of attitude or belief. It is a measure of beliefs grounded in behaviour (Stanovich, 1994). In order to obtain a more accurate measure of these attitudes and beliefs, perhaps these measures should be combined with an observation measure where the researcher can observe the action which a teacher decides to undertake with each student. A teacher may have responded positively on the ATMS and the REITS, but when they are actually confronted with the situation, they may react in a negative manner. The concurrent validity of these measures requires further research.
The ATMS and the REITS were questionnaires used to measure attitudes about integration. Both of these questionnaires correlated positively with self-efficacy. The past research (Denham & Michael, 1981; Semmel et al. 1991; Gibson & Dembo, 1984; Jordan-Wilson & Silverman, 1991) has supported the assumption that attitudes and beliefs are related to self-efficacy. Semmel, Abernathy, Butera and Lesar (1991) developed The Regular Education Initiative Teacher Survey (REITS) to elicit teacher’s attitudes, beliefs and perceptions toward two types of service delivery models, pull-out versus in-class. Generally, the results indicate that both regular and special education teachers favoured the pull-out model over reforms indicated by the Regular Education Initiative. Teachers may have these attitudes because they feel they are not prepared or properly trained to make accommodations for integrating students with special needs into their curriculum and programs. Negative attitudes and beliefs regarding integration result in lower self-efficacy. Teachers who have positive attitudes and beliefs about integrating students into the regular classroom have higher self-efficacy. These teachers feel confident in their teaching abilities and feel they can adapt their curriculum to meet the needs of students in the class.

4.2. LIMITATIONS AND FUTURE RESEARCH

The sample size in this particular study was adequate to determine correlations of moderate size, however, a larger sample size would have been desirable to determine more meaningful relationships. One must not overlook the
bias in sampling. Teachers were asked to volunteer for this project. This may have resulted in more effective teachers volunteering to participate in the project.

The sample size was taken from two different school systems in the Metropolitan Toronto area. It would be interesting to complete the study using teachers from different school systems with different histories in relation to integration. For example, future research could study teachers from a school system that has been implementing integration for numerous years and compare these teachers' self-efficacy with those teachers who are in a school system that has only recently began to implement integration. It would be of interest to evaluate teacher self-efficacy and how this may be affected by the history of the school system.

A significant limitation of this study was in the area of classroom composition. First, the results of effects of classroom composition on self-efficacy were less than significant. Class size and academic heterogeneity could become the subject of an investigation itself. The effects of academic heterogeneity on self-efficacy may have been validated if this variable was examined more closely. For example, the effects of each of the different student exceptionalities on teacher self-efficacy could be examined. Because of time restrictions, this study measured academic heterogeneity utilizing the Ravens' Progressive Matrices. The outcome may have been different if specific student exceptionalities had been used in the analysis.

Another limitation of this study was the effect of teacher beliefs about integration, as measured by the Pathognomonic/Interventionist Interview, on teacher self-efficacy. This study found no direct relationship between these two
variables, however, as was stated, only the attitudinal dimension of the P/I interview was measured. Future research should examine this variable on both the attitudinal dimension as well as the behavioural dimension. A classroom observation measure, linking attitudes to actual behaviours, should be incorporated in order to obtain a true measure of teacher beliefs about integration.

One of the most interesting findings of this study was the lack of a significant relationship between pre-service training and self-efficacy, and school board in-service training and self-efficacy. These variables should be further examined in order to provide suggestions to help improve not only pre-service training but also school board delivered in-service training with respect to special education and integration.

4.3 IMPLICATIONS FOR PRACTICE

The results of this study can be used to assist teachers in assessing whether they have the necessary skills to deal with exceptional and at-risk pupils integrated into the regular classroom. The most interesting finding of this study was that teachers with university in-service training courses had higher self-efficacy scores. Teachers seem to feel more confident when they consider themselves to have had solid training to deal with a challenging situation.

Pre-service and school board in-service teacher training programs were not predictors of self-efficacy. Pre-service teacher training programs can be improved in order to provide teachers with the necessary skills to provide effective teaching
before they ever step into the classroom. Englert, Tarrant, and Mariage (1992) state that teacher education programs must guide their pre-service students to be more effective. Smylie's (1988) model suggests that pre-training levels of personal teaching efficacy and certainty of practice will have positive effects on personal change. If training improves the teacher's self-efficacy and provides for more effective teachers, then we must provide future educators with the necessary training to ensure success. We must provide future teachers with enough knowledge so that they feel capable dealing with exceptional and at-risk pupils in an integrated setting. "If we modified our current teacher training programs...we could integrate our school systems with highly qualified teachers and administrators" (Sachs, p. 231). Students in teacher education programs need training that provides a range of experiences that they may encounter as teachers (Ashton, 1984). Larrivee (1986) states that pre-service teachers should be trained to establish a classroom setting for integrated students that offers a well-organized and highly structured environment. Further research must be conducted so that we may improve our teacher training programs and produce teachers who enter the workforce with a strong sense of efficacy (Bickel & Bickel, 1986; Sachs, 1990; Englert, Tarrant & Mariage, 1992).

The prospects for improving training programs provided by school boards may not be as favourable. Though, school Boards should be providing teachers with supports to effective teaching, in an era of shrinking budgets, disappearing professional development days and dwindling resources, teachers must take on more responsibility for ensuring that they continue to provide an excellent level of
service to their students.

This study also provided evidence that teachers' attitudes and beliefs about integration are related to teachers' self-efficacy. Teachers who hold strong attitudes and beliefs in favour of integration had higher self-efficacy. We should strive to change teachers' attitudes about integration. Teachers should move away from a pathognomonic belief system and move towards an interventionist approach. This research should be used to assist teachers in making the necessary changes. Pathognomonic teachers need to expand their repertoire. They do not need to relearn teaching, but they “need help to progress developmentally from their current ways of teaching if they are to be successful in meeting the needs of students in inclusive classrooms”. (Jordan, Lindsay & Stanovich, 1997, p. 91).

4.4 CONCLUSION

This research study set out to examine the various factors which may affect teacher self-efficacy. The data indicated that the strongest predictors of self-efficacy are teacher training and teachers' attitudes about integration. Past experiences correlated with in-service training provided by university courses, success, number of years teaching and class size. Class size was also related to in-service training provided by school-boards.

Teachers who feel they have been given the necessary training to deal with integration have more confidence in their teaching abilities. Teachers who have previous experience teaching in an integrated setting (either full day or part day) had higher self-ratings of success.
The data also validated the assumption that teacher attitudes and beliefs, as measured by the ATMS and the REITS were strong predictors of teacher self-efficacy. As teachers’ attitudes and beliefs about exceptionalities increase, so does their self-efficacy.

More investigation is required in the areas of class size and academic heterogeneity as these were not predictors of self-efficacy in this study. The literature seems to indicate that, in general, they are positively correlated with self-efficacy. This study set out to outline the factors which may affect teacher self-efficacy. It should be viewed as a preliminary attempt to outline these factors.

Further research is needed to determine how class size and academic heterogeneity may affect teacher self-efficacy. Nevertheless, various components of the model, namely teacher training, past experience and attitudes and beliefs can be of potential use to future researchers. Teacher training was one of the most powerful variables in this study. These findings could be of great value to school boards and teacher training programs. Teachers have implied that if the necessary training is provided, teachers will be better able to meet the needs of all students in the classroom, regardless of academic ability. In increasing this training we would be increasing teacher self-efficacy, thereby, allowing all students the opportunity to learn in the regular classroom.
BIBLIOGRAPHY


APPENDICES
APPENDIX A

Teacher Efficacy Scale

Directions: Please read the following statements and indicate how strongly you agree or disagree using the rating scale provided. Remember, all results are confidential, with only group response being reported.

1 = strongly disagree
2 = moderately disagree
3 = disagree slightly more than agree
4 = agree slightly more than disagree
5 = moderately agree
6 = strongly agree

1. I can only do so much to encourage learning, 1 2 3 4 5 6
   if parents do not encourage learning at home.

2. With some students, their learning potential 1 2 3 4 5 6
   is established before they even come to school.

3. If a student masters a new concept quickly, 1 2 3 4 5 6
   this might be because I knew the necessary steps in teaching that concept.

4. I rise to the challenge of students who refuse 1 2 3 4 5 6
   to try.

5. I tend to increase my efforts with behaviour 1 2 3 4 5 6
   problem students.

6. There is not much that can be done to reduce 1 2 3 4 5 6
   behaviour problems at school.

7. Even the best of teachers cannot teach 1 2 3 4 5 6
   students who do not exert enough effort
   to reach their ability.

8. Even the best teachers stop trying to reach 1 2 3 4 5 6
   students who just won't try.
9. If parents would do more with their children I could do more.

10. Even a teacher with good teaching abilities may not reach all students.

11. A teacher is very limited in what s/he can achieve with a student, as the student's home environment has a large influence on his/her achievement.

12. No matter what I try, a student's performance is influenced more by his/her home environment.

13. If I put just a little more effort into teaching, I can turn on even the most reluctant students.

14. Not all teachers can teach all children.

15. I feel confident in my ability to effectively teach students with behavioural problems.

16. Providing students with opportunities for academic success in a stimulating program is the best way to reduce behaviour problems.

17. Society's relaxed expectations about conduct in general promotes behavioural problems.

18. If I try really hard, I can get through to even the most difficult behavioural problem students.

19. If a student lacks motivation, I know I can encourage his/her to learn in the classroom.

20. If students are not disciplined at home, they are not likely to accept any discipline at school.

21. If a student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him/her quickly.
22. If one of my students could not do an assignment, I could be able to accurately assess whether the assignment was at the correct level of difficulty.

23. When it comes right down to it, a teacher really can't do much because a student's motivation and performance depends on his/her environment.

24. A student's academic performance is primarily related to his/her family background.

25. If the family encourages their child to try, my job is much easier.

26. Letting a student know that I think s/he can learn is enough to motivate him/her to learn.

27. The hours in my classroom have little influence on students, compared to the influence of their home environment.

28. I feel responsible for motivating students to learn.

29. When I try, I can get through to the most difficult students.

30. When a student's performance improves it is usually because I found more effective teaching approaches.

31. Most behavioural problems originate in homes where there is a high level of family discord.

32. The influence of a student's home experiences can be overcome with good teaching.

33. Poor parenting skills account for most of the behaviour problems I see in my school.
34. If a student did not understand the information I gave in a previous lesson, I would know how to reteach the lesson, enabling the student to learn it.

35. When a student does better than usual, many times it is because I exerted a little extra effort.

36. I know I can teach any student(s) in my classroom.

37. When a student is having difficulty with an assignment, I am usually able to adjust it to his/her ability.

38. If a student is not motivated, there is not a lot a teacher can do.
Appendix B

Teacher Training and Past Experience Questionnaire

Directions: Read each question and circle the appropriate answer. Remember all results are confidential, with only group responses being reported.

1. How would you rate your pre-service training in terms of preparing you to integrate exceptional children?

<table>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>No use at all</td>
<td>Very useful</td>
<td></td>
<td></td>
<td></td>
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</table>

2. How would you rate the in-service training provided by the school-board in terms of preparing you to integrate exceptional children?

<table>
<thead>
<tr>
<th>Not applicable or</th>
<th>1</th>
<th>2</th>
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<tbody>
<tr>
<td>No use at all</td>
<td>Very useful</td>
<td></td>
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</tbody>
</table>

3. How would you rate the in-service training provided by university courses (i.e. Master's courses, Additional Qualification courses) in terms of preparing you to integrate exceptional children?

<table>
<thead>
<tr>
<th>Not applicable or</th>
<th>1</th>
<th>2</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td>No use at all</td>
<td>Very useful</td>
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</tbody>
</table>

4. Have you taught classes prior to the 1992/93 school year in which exceptional students were integrated?

   (A) for part of the school day
   Yes No

   (B) for all of the school day
   Yes No
5. If you answered yes to 4(a):

(A) For what subjects was/were the student(s) integrated?

________________________________________________________

________________________________________________________

(B) What was your main objective for this/these student(s)?

________________________________________________________

________________________________________________________

(C) How would you rate yourself as being successful in integrated this/these student(s)?

1 2 3 4 5
Not at all Very well

6. If you answered yes to 4(b):

(A) What was your main objective for this/these student(s)?

________________________________________________________

________________________________________________________

(B) How would you rate yourself as being successful in integrating this/these student(s)?

1 2 3 4 5
Not at all Very well
Appendix C

Raven's Progressive Matrices
APPENDIX D

Attitude Toward Mainstreaming Scale

Directions: For each statement below, select the response that best matches your level of agreement with that statement. Remember, all results are confidential, with only group responses being reported.

Scale:
1 = strongly disagree
2 = moderately disagree
3 = disagree slightly more than agree
4 = agree slightly more than disagree
5 = moderately agree
6 = strongly agree

1. In general, mainstreaming is a desirable educational practice.
   1 2 3 4 5 6

2. Students should have the right to be in regular classrooms.
   1 2 3 4 5 6

3. It is feasible to teach gifted, normal and mentally retarded students in the same class.
   1 2 3 4 5 6

4. Educable mentally retarded students should be in regular classrooms.
   1 2 3 4 5 6

5. Visually handicapped students who can read regular standard printed material should be in regular classrooms.
   1 2 3 4 5 6

6. Blind students who cannot read standard printed material should be in a regular classroom.
   1 2 3 4 5 6

7. Hearing impaired students, who are not deaf, should be in regular classrooms.
   1 2 3 4 5 6

8. Deaf students should be in regular classrooms.
   1 2 3 4 5 6
9. Physically handicapped students who use wheelchairs should be in a regular classrooms.

10. Physically handicapped students who do not need to use wheelchairs should be in regular classrooms.

11. Students with cerebral palsy who cannot control movement of one or more of their limbs should be in regular classrooms.

12. Students who stutter should be in regular classrooms.

13. Students with speech that is difficult to understand should be in regular classroom.

14. Students with epilepsy should be in regular classrooms.

15. Students with diabetes should be in regular classrooms.

16. Students with behaviour disorders who cannot readily control their own behaviour should be in regular classrooms.

17. Students who present persistent discipline problems should be in a regular classrooms.

18. Mainstreaming will be sufficiently successful to be retained as a required educational practice.
APPENDIX E

Regular Education Initiative Teacher Survey

Directions: For each statement below, circle the response (agree or disagree) that best represents your opinion. Students with mild handicaps include those who are: considered to have a learning disability, educably retarded or slow learners, or moderately sensorily impaired. Remember, all results are confidential.

1. The special education teacher should assist in the instruction of both mildly handicapped students and of other students experiencing learning difficulties.  Agree  Disagree

2. Most mildly handicapped students do not feel a sense of belonging in regular classrooms.  Agree  Disagree

3. Mildly handicapped student would experience more academic failure if they were placed full time in the regular classroom.  Agree  Disagree

4. Regular class teachers cannot meet the academic needs of mildly handicapped students currently in their classrooms.  Agree  Disagree

5. Regular class teachers have the primary responsibility for the education of mildly handicapped students in their classrooms.  Agree  Disagree

6. Bringing special education services into regular classrooms will cause serious difficulties in determining “who is in charge”  Agree  Disagree

7. If mildly handicapped children are placed full time in the regular class, then resources currently assigned to special education for their instruction must be protected.  Agree  Disagree

8. Mildly handicapped students would lose the stigma of being “dumb”, “different”, or “failures” if they were placed full time in the regular classroom.  Agree  Disagree
9. Regular class teachers have the instructional skills to teach both mildly handicapped and regular students.  
   Agree  Disagree

10. Psychological assessment usually results in student benefits.  
    Agree  Disagree

11. Regular class teachers, would feel uncomfortable implementing personalized learning plans if mildly handicapped students are placed full time in the regular classroom.  
    Agree  Disagree

12. The time devoted to provincial curriculum goals would increase if mildly handicapped students were placed full time in regular classrooms.  
    Agree  Disagree

13. Achievement levels of mildly handicapped students would increase if they were placed full time in the regular classroom.  
    Agree  Disagree

14. The regular classroom with special education consultant services is the most effective environment to educate mildly handicapped children.  
    Agree  Disagree

15. Regular classroom teachers should be the supervisors of special education personnel working in their classrooms.  
    Agree  Disagree

16. The self-esteem of mildly handicapped students would improve if placed full time in the regular classroom.  
    Agree  Disagree

17. If mildly handicapped students are placed full time in regular education classes, effective special education can be delivered solely within those classes.  
    Agree  Disagree

18. My teacher training prepared me to effectively teach mildly handicapped students.  
    Agree  Disagree

19. Regular class teachers are responsible for the achievement of both mildly handicapped and regular class students.  
    Agree  Disagree
20. Regular class teachers would feel comfortable teach teaching content areas with special education personnel. Agree Disagree

21. The redistribution of special education resources into the regular classroom would decrease the instructional load of the regular classroom teacher. Agree Disagree

22. If mildly handicapped children are placed full time in regular education classes, they will spend most of their time just sitting, doing nothing. Agree Disagree

23. If placed full time in the regular education class, special education personnel and classroom teachers should collaborate on all students' learning problems. Agree Disagree

24. Psychological assessment is useful in helping regular class teachers, tailor their instruction to meet individual student needs. Agree Disagree

25. Mildly handicapped students have a basic right to receive their education in the regular classroom. Agree Disagree

26. Regular class teachers spend too much time on the behaviour management problems of mildly handicapped students. Agree Disagree

27. Achievement levels of regular education students would increase if mildly handicapped students were placed full time in the regular classroom. Agree Disagree
## Elementary Teacher Interview

**1993**

### Demographics

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<tr>
<th>Date of Interview</th>
<th>Interviewer</th>
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<tr>
<th>Interviewee's Name</th>
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<tr>
<th>School Name</th>
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<tr>
<th>School Composition (e.g., grade levels, segregated special education classes, French immersion)</th>
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<th>Interviewee’s Position</th>
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<th>Current Class/Class and Levels</th>
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<tr>
<th>Teaching History (Years, Grades, Special Education Experience)</th>
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<tr>
<th>Certification in Special Education</th>
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<tr>
<td>Additional Qualifications Part 1</td>
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<tr>
<td>Any other S.E. Training? (courses, workshops, etc.)</td>
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</table>
AT RISK

1. Are there any students that are at risk that you are concerned about? (Names, sex, label, subjects?)

2. Tell me what happened when they first came to your attention.
   - with whom did you confer about your concerns?
   - steps?
   - info? OSR, previous teachers, other?
   - contacts? staff, principal?
   - SBST, how do they work together, where work, who sets objectives?
   - expectations/hopes?
   - how long did it take prior to referral?
   - steps taken to get back on track?

3. Did you do anything special to accommodate the child? (class organization, program adaption).

4. Refer to team? (who, when, why, your role, hopes/expectations, satisfied?)

5. Evaluating/Monitoring? (How did you judge your success?)

6. Parents? (when were they first contacted? How often were they contacted? Tell me about how you involved them?)

7. Reporting to parents? (when, how often, who?)
1. **When is the last time you had an identified child in your room?**
   - name, sex
   - label
   - subjects

2. **What do you see your role as being? Goals/expectations?**
   - info you sought, number & variety of sources
   - usefulness and use of info
   - steps, action

3. **With whom did you work? Tell me how you worked with SBST?**
   - Team? Others?
     - (who set objectives?)

4. **Coordination of your info from SBST? Team?**

5. **Did you attend a team meeting about the child?** (If yes, who when, why, your role, satisfied?)

6. **Feelings about collaboration?**

7. **Did you do anything special to accommodate the child?**
   - class organization?
   - program adaption

8. **Evaluating/Monitoring? IPRCs? Reporting?**

9. **Record keeping? Reporting?**

10. **How would you judge how successful you were?**

11. **How did you work with parents?** (when first contacted, how often, how did you involve them?)

12. **Reporting to parents?** (when, how often, who?)
Appendices 95

APPENDIX G

Teacher Interview Rating Criteria

1 = pathognomonic
3 = interventionist

I. Referral and Assessment
A. At-Risk

1. No pre-referral activities prior to bringing in the resource teacher or psychologist (e.g., exploring student’s learning, collecting data, observations, conferring with others) or pre-referral activities are used for confirming student problem.

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Pre-referral activities (exploring student’s learning, collecting data, observations, conferring with others) are used to program for at-risk student.

2. Student referred to examine student’s deficits and confirm student problem.

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Student referred to clarify student’s learning characteristics and to request alternative programming approaches for another teacher to try.
3. Teacher refers student for psycho educational assessments (including Level 1) as soon as possible (i.e. one month).

1
2
3 N/A

Teacher refers student for psycho educational assessments (including Level 1) only after trying a variety of teaching approaches.

4. Teacher views the problem within the student, and expects the student’s problem to be dealt with by the resource teacher or other specialist.

1
2
3 N/A

Teacher views the student’s problem as a result of the student’s interaction with his/her environment, and expects the student’s problem to be addressed within the regular classroom.

B. Identified

5. Teacher sought no previous information about student’s learning characteristics beyond the information contained in the OSR.

1
2
3 N/A

Teacher accesses a variety of sources (teachers, learning skills teacher, special education co-ordinator, resource teacher, principal, parents) to find out about student’s learning characteristics in order to develop programming ideas.
6. Teacher relies on information in OSR, or from regularly scheduled board-wide tests to assess student's current learning levels.

1
2
3 N/A

Teacher conducts informal, individual observations and assessments of student's current learning levels.

SUBSCORE OF SECTION 1:

II. Programming (At-risk and Identified)
A. Goals and Objectives

1. Teacher does not monitor student's progress in order to adapt, update and guide instructional interventions. Student's progress is checked only to report at formal review/report card times.

1
2
3 N/A

Teacher monitors student's progress in order to update and guide instructional interventions. Student's progress is checked throughout the year.
2. Teacher does not set, or record, individual objectives and expects students to perform on criteria set for total class.

   1  
   2  
   3 N/A  

   Teacher records and follows individual instructional objectives for all students in the class and expects students to perform according to their individually set criteria.

B. Organization and Teaching Techniques

3. Teacher does not do anything special to accommodate integrated students into the classroom (e.g., flexible groupings, peer groupings, or classroom layout)

   1  
   2  
   3 N/A  

   Teacher uses modifications to accommodate integrated students into the classroom (flexible groupings, peer pairings, or classroom layout).

4. Teacher does not adapt teaching techniques (peer tutoring, co-operative learning, individualized program packages) to accommodate differences among students.

   1  
   2  
   3 N/A  

   Teacher adapts teaching techniques (peer tutoring, co-operative learning, individualized program packages) to accommodate differences among students.

SUBSCORE OF SECTION II:
III. Review (Identified and At-Risk)

1. Teacher is unaware of ISRT, or sees it as a route to getting the students to resource people.

   1
   2
   3   N/A

   Teacher uses ISRT to seek additional resources for self to use within the classroom.

2. Teacher sees the purpose of the IPRC as a route to confirming the student’s identification and placement.

   1
   2
   3   N/A

   Teacher sees the purpose of the IPRC as a process to review the student’s progress and make appropriate adaptions.

3. Teacher reviews the student’s progress at regularly scheduled testing (school or board-wide tests), and/or when required for reporting to others.

   1
   2
   3   N/A

   Teacher reviews the student’s progress on a regular, on-going basis.

SUBSCORE FOR SECTION III:
IV. Communication with Staff

1. Teacher works largely alone, except to refer student out.
   
   1
   2
   3  N/A

   Teacher works cooperatively with resource and/or special education teachers to solve student problems.

2. Teacher uses no cooperative planning to carry over the regular classroom's program to the resource or special education teacher's program.
   
   1
   2
   3  N/A

   Teacher uses cooperative planning to carry over the regular classroom's program to the resource or special education teacher's program.

3. Teacher does no planning to carry over the resource or special education teacher's program into the regular classroom's program.
   
   1
   2
   3  N/A

   Teacher does planning to carry over the resource or special education teacher's program into the regular classroom's program.
4. Teachers do not report to each other about the student's progress but assume that each is keeping track of his/her piece of the student's program.

   1
   2
   3  N/A

Teachers meets at regular and systematic intervals to keep each other aware of the student's progress.

SUBSCORE FOR SECTION IV:

V. Communication with Parents.

1. Parents of at-risk students are contacted to report student progress only at regularly scheduled times, such as report card time.

   1
   2
   3  N/A

Teacher involves parents of at-risk students early, and prior to regularly scheduled meetings to discuss student's performance within the classroom.

2. Teacher contacts parents if identified pupil exhibits major problems.

   1
   2
   3  N/A

Teacher keeps in touch with parents weekly by notes home, phone calls, or annotations on student's work to which parents are asked to respond.
3. Teacher reports the progress of identified and at-risk students to parents, but only for that portion of the program for which teacher is responsible: no coordination of reporting to parents is done.

1
2
3   N/A

Teacher coordinates and shares the reporting of information on the student's progress with the resource person or special education teachers to parents at meetings.

__________________________

SUBSCORE FOR SECTION V:

__________________________

TOTAL SCORE: