PROGRAM EVALUATION OF A COLLABORATIVE CONSULTATIVE
SERVICE DELIVERY MODEL
FOR STUDENTS WITH LEARNING DISABILITIES

by

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Program Evaluation of a Collaborative Consultative Service Delivery

Model for Students with Learning Disabilities

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Abstract

In the past decade, concerns surrounding both special and general education practices have resulted in a call for school reform and restructuring. One of the suggestions surrounding the restructuring movement is that closer collaboration and the sharing of resources between special and general education will provide more opportunities for all students in the least restrictive environment. Consequently, a number of new service delivery models have been developed across North America for students with special needs in inclusive settings. Of particular interest to special educators is whether or not these service delivery models are providing adequate service and support to the students with special needs and the regular classroom teachers who work with them.

This study was undertaken to evaluate a service delivery model for students with learning disabilities (The Diagnostic Teaching Service-DTS) from the classroom teachers' perspective. Classroom teachers were chosen as subjects because the classroom teacher is the key person in any program implementation. Another purpose of this study was to provide descriptive data to the DTS personnel and to the decision makers responsible for the DTS with the goal of improving the service. The subjects were forty-seven classroom teachers who had accessed the DTS during its first two years of operation, 1991-1993. Subjects completed a comprehensive questionnaire in the Fall and Winter of 1993-1994. Randomly selected subjects were also contacted for a subsequent telephone interview. The DTS teaching personnel were also interviewed by the researcher.

The results of this study indicated that the majority of the respondents were satisfied with the service provided by the DTS and they perceived positive growth in the students referred to the DTS. The majority of the respondents also

stated that they had been very involved in the collaborative problem solving process, were now more comfortable in working with students with learning disabilities and had acquired new skills and strategies that they continue to use with all of their students. Additionally, the results show that this type of service delivery model is one way to promote staff development.

The study also provides descriptive data of the classroom teachers' perceptions of inclusion and the nature of support required. Suggestions for improvement to the DTS are offered and implications for further research are discussed.

For my parents
who by their example and constant support
have shown me that every goal
is attainable

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

viii

LIST OF TABLES

Chapter One

Introduction

Significant changes in education calling for school restructuring in both general and special education are taking place throughout schools in North America (Will,1986; McLeskey,1990; Shanker,1990; Sailor,1991). The impetus for school reform is based on a number of concerns surrounding both general and special education practices. While these concerns will be outlined separately, the similarities presented make a case for the need for close collaboration between special and general education in the restructuring movement (Will,1986; McLeskey,1990; Sailor,1991).

One of the most controversial issues surrounding these changes is the education of students identified as having special needs. While legislation and special interest groups have played a significant role in the call for reform in special education (Osborne and DiMattia,1994), examination of current special education practices has also revealed cause for concern.

One major cause for concern in special education is the issue of identification (Will, 1986; Keogh, 1988; Halgren and Clarizio, 1993). As Keogh (1988) points out, learning disabilities is not a unitary condition. Assessment and measurement problems are compounded by the fact that we deal with fallible measures and a "decision-making process that is embedded in a powerful economic, political and philosophical network" (p.20). Variations in prevalence and the definition of learning disabilities can be found in different geographical areas and in different school districts. Keogh (1988) further suggests that these inconsistencies have sometimes been interpreted to infer that "learning disabilities is a phantom condition and that most pupils served as learning disabled (LD) are misidentified...that they are not really educationally

1

handicapped." (p. 19). Conversely, Will (1986) points out that eligibility requirements and screening procedures may actually exclude many students from much needed educational support. In our current system, these students may not receive support in the regular classroom and are not eligible for special services because they do not meet local requirements for program support (Will, 1986).

The students who do meet local requirements for educational support, have typically been removed from the regular classroom for at least part of the day and placed in a variety of programs designed to meet their educational needs. Another cause for concern in current special education practices, is the very nature of these pull-out programs (Chalfant, 1987; Edgar, 1987; Ainscow, 1991; Kauffman,1993).

A major criticism of these special programs is that however well intentioned, pull-out programs have become barriers to the successful education of students with learning disabilities (Chalfant, 1987; Edgar, 1987; Ainscow, 1991; Gamoran, 1992). This is due in part to the poor quality of instruction offered in many segregated, low-track systems (Ainscow, 1991; Gamoran, 1992; Kauffman, 1993) and the fact that when students are tracked according to ability, classes still remain heterogeneous on most skills so there is no improvement in the fit between students' needs and instruction (Gamoran, 1992). An additional criticism of pull-out programs is the stigmatization resulting in "social rejection, feelings of inadequacy, low self-expectations, failure to persist on task and continued failure to learn." (Chalfant, 1987, p. 243).

While these concerns have caused special educators to look to reform in general education as a means to improve operational procedures for students with learning disabilities (Will, 1986; Reynolds et al., 1987; Ainscow, 1991; Sailor,

2

1991), a concurrent movement in restructuring regular education has also brought the general education systems under scrutiny (Keogh, 1988).

The current drop-out rate and the growing number of students at-risk for dropping out in North America serve as indicators for the need for reform in general education (Shanker, 1990; Sailor, 1991; Neufeld and Stevens, 1992). The average Canadian drop-out rate is 30% with the at-risk characteristics (including school, personal and family related factors) indicating that of the total school population, 40%-50% may be at risk of dropping out (Neufeld and Stevens, 1992). The negative consequences of dropping out are not only evident at the personal level. Drop-outs also put pressure on overburdened social services and threaten our place in a global economy (Shanker, 1990; Neufeld and Stevens, 1992).

The initial response to the growing educational crisis was a flood of reports that called for more rigor in education and included increased academics and a longer school year (Jones, 1986; Glatthorn, 1986, Shanker, 1990). More rigorous academic requirements however, will likely lead to increased failure for students with learning disabilities unless educators also concentrate on developing cognitive and metacognitive strategies that will be needed in a rapidly changing environment and workplace (Glatthorn, 1986; Jones, 1986; Babineau, 1991).

While a review of the literature calling for reform in both special and regular education reveals many similarities, of particular interest to special education is the nature and effectiveness of these reforms in responding to individual needs (Will, 1986; Keogh, 1988; McLeskey, 1990; Kauffman,1993). In exploring new models of service delivery, we must be careful not to erode existing services to students with learning disabilities (Reynolds et al., 1987; Keogh, 1988; Mather and Roberts, 1994).

3

The restructuring of both special and general education means that special and general educators must have opportunities to share skills and resources that will meet individual needs regardless of a student's eligibility for special programs (Will, 1986; Kauffman, 1993). A collaborative structure and a coordination of all services available is required in order for educators to meet the needs of all students (Will, 1986; Reynolds et al., 1987; Keogh, 1988; Ainscow, 1991). One way for special needs teachers to share expertise with regular classroom teachers is through collaborative consultation (West and Idol, 1987; Philips and McCullough, 1990; Kauffman and Tent, 1991; Robinson, 1991). While the goal of collaborative consultation "Is to better meet the needs of diverse students, both handicapped and non-handicapped, in as integrated an educational setting as possible" (Robinson, 1991, p. 442), implementing the collaborative ethic in schools is a complex process (Philips and McCullough, 1990).

As Philips and McCullough (1990) point out, the collaborative ethic involves: 1) joint responsibility for problems, 2) joint accountability and recognition for problem resolution, 3) belief that pooling talents and resources are mutually advantageous, 4) belief that teacher or student problem resolution merits expenditure of time, energy and resources and 5) belief that correlates of collaboration such as group morale, group cohesion, increased knowledge of problem solving processes and specific alternative classroom interventions are important and desirable.

Several studies examining various service delivery models have been conducted recently (Cooper and Speece, 1990; Fuchs et al., 1990; Shulte et al., 1990; Zigmond and Baker, 1990). In her review of these studies, Keogh (1990) points out that the key person in any program implementation is the teacher. This has

4

important implications for the development of any service delivery model and for pre- and in-service training since individual teacher skills, styles, attitudes and beliefs will likely influence intervention outcomes (Keogh, 1990).

While the current reform movement is attempting to increase collaboration among all educators, several barriers to effective collaboration will need to be examined when implementing effective service delivery models for students with learning disabilities. These barriers to effective collaboration may be personal (i.e. opposition to change, lack of collaborative skills, lack of knowledge about instructional strategies, and lack of ownership), structural (i.e. lack of planning and meeting time and scheduling problems) or external (i.e. lack of funds for training teachers in new skills, regulations that are not responsive to change and lack of administrative support for change) (Robinson, 1991).

The purpose of this study is to evaluate a collaborative consultative model of service delivery for students with learning disabilities in an inclusive setting. While this model also attempts to address the structural and external barriers outlined by Robinson (1991), this study will focus on the personal barriers to effective consultation by examining classroom teachers' and itinerant support teachers' perceptions of the effectiveness of this service delivery model.

Program Description and Method of Evaluation

The Board of School Trustees for the Maple Ridge-Pitt Meadows School District has made a commitment to provide educational services to students with special needs within their home schools and to the greatest extent possible, to meet their individual educational goals within the setting and learning

5

context of their peers. This is based on the assumptions outlined in the Full Service Neighbourhood Schools Document, February 1991:

> *Every child, regardless of his/her gifts or challenges, is entitled to attend his/her community school; and*
>
> *All personnel in a particular school accept the responsibility to work in collaboration with other professionals to provide appropriate educational programs for all their students.*

and is consistent with the Minister's Order 150/89 which states that:

> *Unless the educational needs of a handicapped student indicate the student's educational program should be provided otherwise, a board shall provide that student with an educational program in classrooms where that student is integrated with other students who do not have handicaps.*

The District allocates the additional Ministry of Education special education resources to the neighbourhood schools to assist in delivering the appropriate educational programs to these students. However, it is recognized that a need remains for district services that support students directly and support school-based teachers and schools with programming for students with special needs. Since the inception of District programs for students with severe learning disabilities, there has been a continuous adaptation and refinement of services to meet the changing needs of referred students and their schools. These services have evolved from a partial pull-out program known previously as the Diagnostic Teaching Centre-DTC in September 1984, to the current inclusive program, Diagnostic Teaching Service (DTS) which is now in its third year of operation.

The original DTC was a district based program where students were pulled

from their home schools to attend the centre for a three month period. These students attended the Diagnostic Teaching Centre in the mornings and returned to their home school in the afternoons. One of the concerns surrounding the DTC was the lack of planning time and follow up for both teachers and students once the latter returned to their home schools. The current Diagnostic Teaching Service was designed to provide continuous, on-going support to students and teachers in their home schools. The development of this new service delivery model was based on information gathered through an informal needs survey circulated throughout the district in May, 1991.

Although there was a range of opinion regarding the re-organization of the DTC, there was clear consensus regarding the nature of the service required. To meet the needs of the students with learning disabilities, service needs to provide both intensive and on-going assistance and support for the student, the classroom teacher, and the school-based teams. This conclusion guided the development of a collaborative-consultative model for delivery of service to students with severe learning disabilities within their home schools.

Originally, the DTS began as a team consisting of two full-time teachers and one part time teaching assistant. The DTS team was designed to provide flexibility in responding to the concerns and needs that arise in teaching students with learning disabilities. Due to recent cutbacks and the promotion of one of the DTS teachers, the DTS team for the 93/94 school year consists of one full time teacher and one full time teaching assistant.

Now that this service delivery model is in its third year of operation, the information users and decision makers wished to conduct a formal evaluation of the DTS. Since the key person in any program implementation is the teacher (Keogh, 1990), the subjects of this program evaluation were the

classroom teachers who had been involved with the DTS and its personnel.

The method of evaluation was a qualitative study. Data were collected through a questionnaire distributed to classroom teachers and the DTS personnel. Length of involvement and type of service delivered by the DTS varied from teacher to teacher based on individual teacher and referred students' needs. Structured telephone interviews were also conducted with randomly selected program participants which included seven of the total sample of forty-seven teacher participants.

The DTS personnel and District personnel responsible for the program were interviewed by the researcher to ascertain what information they wished to achieve through this program evaluation. Once this information was obtained, the evaluator developed the questions to be answered by the program participants. The DTS and District personnel were then involved in assisting the evaluator in the fine tuning and piloting of the questionnaires. While the DTS personnel assisted in the distribution and collection of questionnaires, the evaluator was responsible for conducting each of the structured interviews and analyzing the data collected.

The evaluation was designed to focus on three main questions: 1) Has the classroom teacher's involvement with the DTS improved his/her comfort level in working with students with learning disabilities? 2) To what degree did classroom teachers feel they were involved in the collaborative problem solving process? 3) Were classroom teachers satisfied with the intervention support provided by the DTS?

The DTS, based on collaborative consultation, was designed to be a flexible, itinerant support service to the changing needs of both classroom teachers and students. The program staff and District personnel wished to

determine whether or not the existing process utilized by the DTS was effective in promoting collaborative problem solving and teacher growth and change. These information users and decision makers also wished to determine which elements of the program were most effective and what changes needed to be made in order to provide adequate service to classroom teachers and students with learning disabilities. This evaluation study provided relevant descriptive data in the areas outlined above. It is hoped that the obtained information would also be useful to other districts where there is interest in developing similar service delivery models for students with learning disabilities.

Limitations of the Study

One possible limitation of this study is the sample size. Just over half of the forty-seven teachers who accessed the DTS in the first two years of operation returned completed questionnaires. Another possible limitation is that the data was based on teachers' perceptions of the DTS. While this may be seen as a limitation, it was important to look at teachers' perceptions of the service delivery model since they are ultimately responsible for the implementation of interventions in their classrooms. A further limitation of the study is that the data did not show that classroom teachers were often working with a very diverse population over and above their students with learning disabilities. In some cases, regular classroom teachers were also working with students with multiple handicaps and students with severe behaviour difficulties. A final limitation of the study is that the respondents who accessed the DTS, did so voluntarily. The data do not provide information about the teachers who declined to complete the questionnaire or about students and teachers in the District who did not access the DTS.

Definition of Terms

Categorical Programs

Pull-out programs for students with specific labels usually determined as a result of formal assessment procedures.

Direct Service

This term is used when itinerant or school based personnel work directly with the students with learning disabilities.

Inclusion

Term used as opposed to mainstreaming and integration. All students, regardless of categorical label or special learning needs receive instruction with their peers in regular classrooms in their home schools.

Indirect Service

Service is provided to students with LD indirectly when special education personnel work collaboratively with regular classroom teachers.

Low Track Systems

This term refers to segregated classes where students with learning disabilities are streamed according to ability.

School Support Teacher (SST)

The Maple Ridge-Pitt Meadows School District has collapsed the traditional roles of the learning assistance teacher and the special education teachers. All teachers in the district working with students with identified learning needs are called school support teachers. Depending on the school population and the numbers of students identified with special needs, an elementary school could have anywhere from one to four teachers working in this capacity.

Chapter Two

Review of the Literature

It is evident from the introduction to this study that there is widespread concern about the quality of instruction in both general and special education. General education has come under scrunity with the growing number of at-risk children and the increased drop-out rate in North America (Shanker, 1990; Sailor, 1991; Neufeld and Stevens, 1992; Stevens and Price, 1992). Environmental factors outside the education system such as poverty, prenatal exposure to drugs and alcohol, abuse, and improved medical technology which has resulted in keeping more premature and handicapped children alive, have resulted in a growing number of children entering the education system with special learning needs (Bartel and Thurman, 1992; Burgess and Streissguth, 1992; Griffith, 1992; Stevens and Price, 1992). The increasing statistics surrounding these environmental factors indicate that student learning and behaviour problems will continue to rise and general education will need to provide the additional program supports that these children require (McLeskey et al., 1990; Pianta, 1990; Stevens and Price, 1992).

The initial response to this educational crisis was a call for school reform and restructuring that focused on more rigor in education and emphasized increased academics, and raising standards for graduation and teacher certification (Jones, 1986; Glatthorn, 1986; Shanker, 1990; McLaughlin and Hopfengardner Warren, 1992). There was a subsequent recognition, however, that more rigorous academic requirements would likely lead to increased failure for students with learning problems unless educators also concentrated on developing appropriate strategies and supports for these students in a rapidly changing environment and workplace (Glatthorn, 1986; Jones, 1986; Babineau,

11

1991). More recently, the restructuring movement in general education has shifted attention to adapting the very structure of education to meet the needs of a changing demography (Sailor, 1991; McLaughlin and Hopfengardner Warren, 1992; Stevens and Price, 1992).

A concurrent restructuring movement has also taken place in special education. While legislation and special interest groups have played a significant role in the need to restructure supports to children with special needs (Forest and Pearpoint, 1992; Osborne and DiMattia, 1994), examination of current special education practices has also revealed cause for concern.

One major cause for concern is the issue of identification of students with special needs (Will, 1986; Keogh, 1988; Wang et. al., 1992;). As Keogh (1988) points out, learning disabilities is not a unitary condition. Assessment and measurement problems are compounded by the fact that we deal with fallible measures and a "decision-making process that is embedded in a powerful economic, political and philosophical network" (p.20). Variations in prevalence and the definition of learning disabilities can be found in different geographical areas and in different school districts. Keogh (1988) further suggests that these inconsistencies have sometimes been interpreted to infer that "learning disabilities is a phantom condition and that most pupils served as learning disabled (LD) are misidentified...that they are not really educationally handicapped." (p.19). Conversely, Will (1986) points out that eligibility requirements and screening procedures may actually exclude many students from much needed educational support. In our current system, these students may not receive support in the regular classroom and are not eligible for special services because they do not meet local requirements for program support (Will, 1986).

The students who do meet local requirements for educational support, have typically been removed from the regular classroom for at least part of the day and placed in a variety of programs designed to meet their educational needs. Another cause for concern in current special education practices, is the very nature of these pull-out programs (Chalfant, 1987; Edgar, 1987; Ainscow, 1991; Gamoran, 1992; Kauffman, 1993). A major criticism of these special programs is that however well intentioned, pull-out programs have become barriers to the successful education of students with learning disabilities (Chalfant, 1987; Edgar, 1987; Ainscow, 1991; Gamoran, 1992). This is due in part of the nature of instruction offered in many segregated, low-track systems (Jenkins et. al., 1990; Ainscow, 1991; Gamoran, 1992) and the fact that when students are tracked according to ability, classes still remain heterogeneous on most skills so there is no improvement in the fit between students' needs and instruction (Gamoran, 1992). An additional criticism of pull-out programs is the stigmatization resulting in "social rejection, feelings of inadequacy, low self-expectations, failure to persist on task and continued failure to learn." (Chalfant, 1987, p. 243).

Current funding patterns and limited resources further indicate the need for the field of special education to explore and evaluate alternatives to traditional practices (Graden et al., 1985a; Case, 1992; Kauffman, 1993).

The growing number of at-risk children and concerns surrounding current special education practices, have caused both special and general educators to look at restructuring with a "shared educational agenda, one that holds potential for capturing the innovative elements of improvement and reform in federal categorical programs such as special education as well as elements in general education reform" (Sailor, 1991, p.8-9). While Sailor's (1991)

comments reflect the movement in the United States, Canadian educators are also calling for a shared educational agenda (Neufeld and Stevens, 1992).

In these times of educational reform, it is imperative for special educators to bring their expertise into the mainstream of regular education since closer collaboration between regular and special education will provide opportunities to improve the learning of all students in the least restrictive environment (McLeskey, 1990; Sailor, 1991; Case, 1992; Kauffman, 1993). Resources traditionally used to test and place large numbers of students into categorical programs will also need to be redirected to provide assistance for students and their teachers in the regular classrooms where the problems first arise (Graden et al., 1985 a; Will, 1986). While there will always be a need for a continuum of services including pull-out programs (Mather and Roberts, 1994; Zigmond and Baker, 1994), educators are also looking to the critical process of early identification and intervention as a means to more effectively meet the needs of all students (Will, 1986; Fuchs et. al., 1990; Givens-Ogle et. al., 1992).

In order to develop a service delivery model that focuses on prevention of overidentification of students as having disabilities, and that provides support to all students and teachers, researchers and educators will need to develop a consultative collaborative structure that focuses on prereferral intervention (Graden et al., 1985; Will, 1986; Fuchs et.al., 1990). A major goal of this type of service delivery model is to identify successful interventions to help students remain in the least restrictive environment, the regular classroom (Graden et al., 1985a; Fuchs et. al., 1990; Givens-Ogle et.al., 1992). This form of service delivery will also ensure that supports can be extended to all students regardless of categorical label (Reynolds et al., 1987).

Important Features of a Collaborative Model

While different types of consultation models can be found in a variety of disciplines, the collaborative model most commonly used in the field of education emphasizes two major goals: 1) to solve the immediate problem and 2) to teach the consultee to solve those problems likely to appear in the future (West and Idol, 1987; Phillips and McCullough, 1990). Though confusion exists about models and terminology, Phillips and McCullough (1990) outline generic characteristics that can be found in most school consultation literature as follows: 1) Indirect service (triadic model; consultant-consultee-client). 2) Collaborative professional relationships (includes notion of coordinate status; co-ownership of problem and process). 3) Recognition of consultee rights (engagement is voluntary and confidential; consultee retains the right to reject solutions). 4) Problem-solving orientation. 5) Attention to a two-fold goal: a. Immediate problem resolution; b. Increase in consultee skill/knowledge for independent resolution of similar problems in the future.

The principal assumption underlying consultation is that of shared power and decision making (Graden et al., 1985a; Robinson, 1991). While the consultant is seen as a resource to the consultee (teacher) with each holding equal power, the final decision regarding selection of interventions must lie with the teacher in order for the teacher to have ownership of the interventions.

A second assumption underlying the development of a collaborative consultative model is that of indirect rather than direct service to the referred student (Graden et al., 1985a; Fuchs et.al., 1990; Robinson, 1991). While this assumption means that supports will be available to all students and their teachers, it does not mean that there will never be a need for direct service. Rather, indirect service should be viewed on a continuum with direct service

(Graden et al., 1985a; Mather and Roberts, 1994).

In order to facilitate collaborative consultation, a third assumption is that consultants and consultees must have the skills necessary to implement the consultation model (Graden et al., 1985a; West and Idol, 1987; Gersten et.al., 1991; Robinson, 1991). As cited in Graden et al., (1985a), Curtis and Meyers (1984) describe four important skill areas as: a) interpersonal skills, b) problem-solving skills, c) content expertise and d) an understanding of systems theory. These skills will be discussed at length in a subsequent section of this chapter.

A fourth assumption is that there are suggested stages of implementing a collaborative consultation model of service delivery (Graden et al., 1985a; West and Idol, 1987; Tindal et al., 1990).

Stages of Consultation

Though the names of the various stages and the exact number of stages vary from model to model (Graden et. al., 1985a; West and Idol, 1987; Robinson, 1991; Givens-Ogle et. al., 1992; Zigmond and Baker, 1994), West and Idol (1987) point out that nearly all models of consultation have a series of stages associated with data collection, data analysis, evaluation and feedback. For the purpose of this study, the researcher chose to highlight the six stages of the Prereferral Intervention System Model (Graden et al., 1985a) since they most closely reflect the stages of consultation utilized by the DTS, the service delivery model under evaluation. The six stages in this model are: request for consultation, consultation, observation, conference, formal referral, and formal program meeting.

Stage 1: Request for consultation. In this stage, the classroom teacher initiates the process by requesting consultation from the assigned consultant. Depending on the site specific resources and model, this consultant could be the

school psychologist, special education teacher, school social worker, or other school person (Graden et al., 1985a). The referral for consultation can occur at least two ways. In the first instance, the referral can be an informal process in which the teacher requests problem solving assistance directly from the school consultant. In the second instance, all initial referrals are screened by a building team for group problem solving, and a consultant is then assigned by the team to assist in follow-up consultation. Variations between these two approaches can also be found in various consultation models (Graden et al., 1985a; Robinson et. al., 1991; Givens-Ogle et.al., 1992 Zigmond and Baker, 1994).

Stage 2: Consultation In this stage, consultation takes place to identify the specific area of concern, brainstorm possible interventions, and implement and evaluate possible interventions. In this phase of the consultation process, a shared, problem-solving relationship is established between the classroom teacher and the consultant and priorities are set for action. Relevant classroom variables are analyzed in relation to their effect on the discrepancy between actual student performance and the teacher's expected performance. Intervention plans that may include the student, parent, and other school personnel are jointly designed by the consultant and the teacher. These plans are then implemented and evaluated. It is important to note that at this stage of consultation, the process will either end as a result of successful intervention (with provision for follow-up consultation) or will continue for additional suggestions (Graden et al., 1985a).

Stage 3: Observation. If the first intervention plan is unsuccessful, the observation phase is used to gather additional data through detailed observation of the student and the classroom environment. The observer is usually an outside consultant but the classroom teacher may also fill this role from time to

time. These observations can provide data to assist in developing further intervention plans. Once again, the observer and the classroom teacher jointly design the intervention plans which are then implemented and evaluated. If the interventions are successful at this point, then the process ends with provision for further consultation. The process may continue if more intensive intervention is needed. The intervention plans, which are the result of the consultation and observation phases, provide critical data on the effect of the intervention in attaining a match between the student and the instructional/teaching environment (Graden et al., 1985a).

Stage 4: Conference. Conferences are held with a team of people to share information and make decisions about future interventions. The team usually consists of the referring teacher, consultant(s), parents, students (if appropriate), and other relevant school personnel. During conferences, previous data on consultations and observations are shared and feedback from team members is sought. It is during the conference stage that decisions are made to either continue with the interventions as implemented, modify the interventions, or refer the child for psychoeducational assessment and possible consideration for more intensive, direct service.

Stage 5: Formal referral. If a formal referral is made for a psychoeducational assessment, the student enters the formal child study process with due process regulations (Graden et al., 1985a). The evaluators use data collected from stages 1-4 as well as additional assessment tools. It should be noted that "assessment is based on the particular needs of the situation and therefore may be non-test-based, curriculum based, or criterion-referenced, in order to answer the specific questions raised by the data from intervention attempts" (Graden et al., 1985 a, p.382).

18

<u>Stage 6: Formal program meeting</u>. During this stage of the consultation process, the team meets to determine whether alternative plans such as alternative placement or more intense interventions are necessary. An Individualized Education Plan (IEP) is developed and the team determines whether the IEP will be implemented by direct special services or by consultation in the regular classroom.

Implementing the Collaborative Consultation Model

While the stages outlined by Graden et al., (1985a) provide an outline for the consultation process, creating an ethic for collaboration in a school environment is a complex process (Phillips and McCullough, 1990). For example, Tindal et al., (1990) point out that the roles and responsibilities of consultants and consultees may vary as a function of the stage of consultation. Also to be considered are the people and process variables surrounding consultation cases such as interpersonal skills, training in consultation skills, administrative support and school district priorities (Graden et al., 1985b; West and Idol, 1987; Phillips and McCullough, 1990; Tindal et al., 1990; Robinson, 1991).

As Phillips and McCullough (1990) suggest, personnel are advised to consider several prerequisites to implementing the collaborative process in their schools: a) colleagues must be able to identify important problems for which joint problem solving is necessary and appropriate; b) a body of knowledge and skills must be held in common; c) involvement should facilitate a sense of ownership in the problem solving process; d) organizational structure should be in place to ensure that consultation occurs; and e) collegial problem solving should be valued as a tool for the concerned and dedicated educator.

School District Priorities

In order to develop an effective collaborative structure, there needs to be multilevel participatory planning and decision making that begins at the district level (Phillips and McCullough, 1990). This begins with a school district's philosophy towards educating students with special needs. For example, a district with administrators who see providing students an appropriate education in the least restrictive setting as a priority, would provide an arena for support service personnel to implement a collaborative consultation model (Graden et al., 1985b; Phillips and McCullough, 1990). Graden et. al. (1985b) suggest that one way for district administrators to demonstrate their commitment to this type of service delivery model is to offer incentives to schools and teachers for providing effective interventions for students. In addition to setting priorities for developing service delivery based on consultation, district level administrators should also be involved in decisions related to format selection and in planning for program maintenance and replication (Phillips and McCullough, 1990).

School Administrator Support

Active, visible involvement of school-based administrators is necessary in both planning and implementation activities (Phillips and McCullough, 1990; Tindal et. al., 1990). In a study of six schools using a collaborative consultation model, Graden et al., (1985b) noted that in the successful schools, administrative support was both verbal and visibly apparent through continued support and resources. Idol and West (1987) also noted that support from school principals was perhaps one of the most critical factors for successful school consultation. As with other participants then, the school administrators must be identified and their skills, backgrounds, experiences and resources analyzed in relation to

their abilty to provide adequate support for consultation practices in their schools (Tindal et al., 1990).

It is also imperative for administrators to understand the concept and the operation of the selected consultation based format as well as the leadership requirements involved (Phillips and McCullough, 1990; Tindal et. al., 1990). Specifically, Phillips and McCullough (1990) point out that administrators should be: a) provided information that assists in formulating a conceptual understanding of collaborative consultation; b) exposed to a variety of collaborative consultation formats (including the conditions under which each format proves most effective); and c) provided a repertoire of concrete strategies for addressing implementation issues such as incentives, time, training, publicity and staff receptiveness.

Resistance to Collaborative Consultation

District level administrators, school based principals, and consultants should be cognizant of the resistance to consultation that may interfere with the successful implementation of a collaborative consultation model of service delivery. One element that could impede the development of such a model, could exist at the systems level with only lukewarm support or active opposition from district and building level administrators (Piersel and Gutkin, 1983; Phillips and McCullough, 1990). For example, Piersel and Gutkin (1983) point out that administrators often provide verbal support for consultation services while simultaneously demanding that psychologists spend the bulk of their time doing other activities such as testing.

Another element that could lead to resistance at the systems level is that change is a natural outcome of effective consultation. School administrators, many of whom are faced with a continuous stream of change resulting from a

variety of sources, might resist any new approach to service delivery that has the potential to increase pressures for change from within their own system (Piersel and Gutkin, 1983; Graden et. al., 1985; Phillips and McCullough, 1990; Robinson, 1991). Examples of such changes could be loss of funds due to changing labelling practices and the fact that prevention services are hard to document which could lead to problems with accountability (Piersel and Gutkin, 1983).

Perhaps the most common factor that contributes to resistance at the building level is the fact that effective consultation requires considerable energy from the consultee before any benefits become evident (Piersel and Gutkin, 1983; Friend and Bauwens, 1988; Kauffman and Trent, 1991; Robinson, 1991). As Piersel and Gutkin (1983) point out, from a classroom teacher's perspective, the best intervention for a child may seem to be the one that requires the least amount of time and effort. Contrary to this perspective, consultation requires that the classroom teacher be an active participant in the process (Phillips and McCullough, 1990; Robinson, 1991). In addition, teachers are required to learn a variety of new skills that go beyond the scope of their college training. As Robinson (1991) points out, some teachers may lack both skills in working collaboratively and knowledge about effective strategies that can be utilized to accommodate a diverse student population.

Another factor leading to resistance at the building level is the possibility of conflicting expectations between the consultant and the consultee that may cause the consultee to see the appropriate consultant behaviours as punishing (Piersel and Gutkin, 1983; Friend and Bauwens, 1988; Robinson, 1991). For instance, if a classroom teacher is expecting a child to be removed from his/her classroom or that the psychologist will work directly with the child, they may find consultation to be punitive or threatening.

Consultation can also cause anxiety for the classroom teacher. Anxiety can be caused through the consultant's presence in the classroom or the fact that consultative interaction with support personnel is often a new experience for the classroom teacher. (Piersel and Gutkin,1983; Friend and Bauwens, 1988; Phillips and McCullough, 1990). This anxiety may also be heightened by the support teacher's own discomfort if they have not been formally trained in consultation techniques (Idol and West, 1987; Phillips and McCullough, 1990).

Another factor contributing to resistance is that consultation models assume that because a teacher is an important part of the student's environment, he/she is also a part of the problem. Teachers must now face the fact that a student may not be learning to read because they have not adequately matched the educational environment to that student's needs (Piersel and Gutkin, 1983; Friend and Bauwens, 1988; Robinson, 1991). This also means that the classroom teacher may feel ultimately responsible for any unsuccessful treatments no matter what the cause of the failure.

A final factor contributing to resistance to implementation of a consultative model may be the consultant's workload. If consultants are expected to fulfill their traditional roles such as in assessment and identification or they maintain direct service responsibilities, they may have insufficient time to fulfill their consultant roles (Piersel and Gutkin, 1983; Phillips and McCullough, 1990).

Planning and Decision Making

Involvement of staff at all levels is essential to program success. As cited in Phillips and McCullough (1990), participation in planning and decision making, particularly by regular teachers, has been linked with the following: a) increased collaboration, b) increased ownership and commitment to program

goals, c) integrity in program implementation and maintenance and, d) successful implementation of school innovation and change. Not only is whole staff involvement consistent with a collaborative consultation approach, teacher involvement has also been shown to reduce resistance to change (Phillips and McCullough, 1990; York and Vandercook, 1990; Giangreco et. al., 1993).

Whole staff involvement means that the consultation process can be tailored to meet individual building needs. As Phillips and McCullough (1990, p. 299) point out, "schools are more likely to adopt, implement, and maintain a format they perceive to be compatible with current infrastructure - existing building routines, resources, and philosophy - than a format which dramatically deviates from building norms." In their study of six schools, Graden et al., (1985b) attributed part of the success of the consultation model to the fact that slight modifications to the process were made in each building. These modifications were made after consultation with principals, teacher teams and district personnel.

In order to involve all personnel in the consultation process, time must be available for teachers to consult (Robinson, 1991; Gelzheiser and Meyers in press). As cited in Idol and West (1987), time to consult is the single most important facilitator of the consultation process. While this may be true, Idol and West (1987, p. 490) also point out that recent studies have shown that "consultation still appears to be regarded as a luxury by school district administrators in decision-making positions." The following are suggestions as to how individual schools can provide time for consultation: a) schedules of resource and classroom teachers should be reviewed and adjusted to permit adequate time for collaborative problem solving (Idol and West, 1987; Gelzheiser and Meyers, 1990; Robinson, 1991), b) the pupil-teacher ratios of resource and

consulting teachers may need to be adjusted to allocation of time to consult (Idol and West, 1987; Phillips and McCullough, 1990), and c) the actual job descriptions of resource and consulting teachers may need to be redefined to provide for a better balance among assessment, teaching and consulting roles (Gersten et. al., 1991; Kauffman and Trent, 1991).

Consultant Variables

A number of specific consultant skills have been reported as essential for consultation success. While no consistent set of skills has been identified, a profile of the successful school consultant is emerging from the literature (West and Idol, 1987; Tindal et al., 1990; Gesten et. al., 1991; Robinson, 1991).

As cited in West and Idol (1987) and Tindal et al. (1990), some studies have focused on personality traits such as consultant cooperativeness, emotional stability, personal adjustment, ability to inspire confidence, facilitativeness, empathy, flexibility, warmth and understanding. These personality traits have been associated with consultees' perceptions of successful consultation outcomes.

Other studies have focused on the importance of consultation process skills of the consultant such as efficiency in responding to referrals, flexibility in applying psychological principles, and skills in eliciting information and action from the consultee (Friend and Bauwens, 1988; Gersten et. al., 1991; Robinson, 1991). As cited in West and Idol (1987, p. 398), similar studies have also shown that "in cases in which the problem is identified to the satisfaction of both the consultant and consultee, successful problem solving through the remainder of the consultation process almost invariably results."

Additional studies have emphasized the importance of consultant collaboration skills as a key to successful consultation. These studies showed that

not only did consultees prefer collaborative consultants but they also initiated more consultation contacts when consultants used collaboration in contrast to an expert mode of consultation (West and Idol, 1987; Friend and Bauwens, 1988).

While collaboration may be the preferred mode of consultation, specialists still tend to take on an expert role and this continues to remain a major obstacle (Pugach and Johnson, 1989). As Pugach and Johnson (1989, p. 235) point out, "For collaborative working relationships to be realized, specialists will have to work hard to shed the expert image to which they have been socialized and which many classroom teachers have come to expect of them." In order to ensure the success of collaboration, special educators and consultants will also need to recognize the expertise of classroom teachers as a valid source of assistance (Friend and Bauwens, 1988; Giangreco et. al., 1993). It is also important for consultants to be knowledgeable about the range of characteristics that consultees find important, given that an absolute set of essential consultant skills is lacking (Tindal et al., 1990; Robinson, 1991). The selection of specific skills to be used should be based on individual building needs including student, administrative and consultee variables (Tindal et al., 1990). Finally, school districts should consider these characteristics when developing in-service training on consultation (Idol and West, 1987; Gersten et. al., 1991; Givens-Ogle et. al., 1991).

Consultee Variables

One of the first steps toward successful consultation is to identify the consultee. As Tindal et al. (1990) point out, the simple triadic model is insufficient since there may be more than one consultee. For instance, the target of change may be outside the school (parents), within the district or building (superintendent/ principal), or within the classroom (teacher/aide).

Once consultees are identified, their skills, experiences, knowledge, resources and perspectives must be considered, since program implementation is completed through them (Tindal et al., 1990; Robinson, 1991; Giangreco et. al., 1993). As cited in Tindal et al. (1990), a number of specific consultee characteristics can have an impact on the success of the consultation process. These include: a) expectations and tolerance, the standards of acceptable classroom behaviour that they demand and the degree to which they are willing to tolerate certain behaviours, b) understanding of the consultation process and their cooperation with consultants, c) acceptance of specific treatments that will be effective in their classrooms, particularly in reference to the perceived degree of effectiveness of the proposed intervention and the amount of time/resources required to implement the treatment, and d) beliefs and theorectical orientation of the consultant.

While many consultation training programs exist (Idol and West, 1987; Gersten et. al., 1991; Givens-Ogle et. al., 1991), few programs have addressed the training of consultees (West and Idol, 1987; Tindal et al., 1990). School district administrators should consider developing training programs for consultees that focus on problem identification, problem analysis, plan implementation, and program evaluation (Idol and West, 19897). They should also try to determine which consultee and consultant characteristics influence "consultation readiness" level since the level of relationship between the consultant and the consultee significantly influences the use and effectiveness of consultation in school settings (Friend and Bauwens, 1988; Robinson, 1991).

Perhaps the most critical variable to attribute to consultation success is the degree to which the consultee views the intervention proposal as one that can be carried out given his/her teaching approach, classroom situation, skill level, and

philosophy (Phillips and McCullough, 1990). Consultants must recognize the complexity of regular classrooms and the pressures imposed on classroom teachers. In doing so, they should provide the classroom teachers with concrete strategies that can readily be implemented in individual classroom situations (Phillips and McCullough, 1990; Giangreco et. al., 1993).

Classroom Teachers' Perceptions

Since the classroom teacher is ultimately responsible for the implementation of interventions in inclusive classrooms, researchers should also focus on classroom teachers' perceptions of the effectiveness of a collaborative consultation service delivery model for students with learning difficulties. Several studies have been conducted recently that highlight the teachers' role in, and perceptions of, inclusive service delivery models (Gelzheiser and Meyers, 1990; Meyers et. al., 1991; Giangreco et. al., 1993; and Gelzheiser and Meyers, in press).

In their most recent study, Gelzheiser and Meyers (in press) point out that "existing studies do not examine in detail the experience that participants have had with mainstreaming." p.7. In their study, they attempt to address this issue by contrasting the views of general education teachers participating in an integrated program (pull-in) with those of general education teachers who had their students in a pull-out approach. They hypothesized that experience with an integrated program would be related to a different perspective on mainstreaming.

In the above study, Gelzheiser and Meyer (in press) focused on: a) the features of mainstreaming that the teachers saw as advantages and disadvantages, b) the conditions where mainstreaming would or would not work and c) whether teachers with experience with pull-in programs had a

different perspective on mainstreaming than those who lacked experience. They found that, pull-in participants were most likely to see pull-in as having advantages that were related to their own teaching needs such as meeting the needs of the class, working with another teacher, curricular coordination, and the classroom teachers' increased understanding of students. Pull-out participants, however, identified disadvantages to the teacher which included, limitations to teaching, uncomfortable feelings, logistics, a need for a common philosophy, more narrow coverage of curriculum, and discipline problems. These findings suggest that those who wish to promote inclusive models of service delivery should focus on its advantages to the teacher and the classroom as a whole (Gelzheiser and Meyer, in press).

Another finding of this study, based on comments surrounding disadvantages for teachers and classrooms, suggests that some resistance to pull-in such as logistics and discipline concerns may be more easily overcome than resistance that stems from incompatible teaching philosophy. This means that for those who wish to encourage inclusive service delivery models, it is essential to identify sources of resistance and act appropriately. Further findings suggest that it "would benefit some teachers who lack experience with pull-in if administrators attended to logistical barriers and offered teacher training which stressed the kind of planning needed, provided time for planning, and delineated strategies to meet student needs." p25,26.

Since the findings of this study suggest that teachers in pull-in programs held some different views of incusion than those in pull-out programs, a teacher's experience with inclusion must be considered in future research on mainstreaming attitudes (Gelzheiser and Meyer, in press). Gelzheiser and Meyer (in press) also point out that " it may be useful to involve experienced pull-in

teachers in the process of introducing a new appproach to service delivery and changing the perspective of teachers with limited mainstreaming experience." p. 27.

In a previous three year study involving classroom, remedial and resource teachers from six elementary schools, Gelzheiser and Meyers (1990) examined various alternatives to pull-out programs that were designed by the various teachers involved. Each of the programs was designed to meet individual teacher and school needs and thus varied from school to school. According to the teachers in this study, many remedial students reported that they preferred pull-in instruction to pull-out because they could remain with their peers and receive help. Another benefit of the program was the increased use of individualized instruction in the regular classroom.

A recurring problem surrounding pull-in programs, lack of collaborative planning, was also noted in this study. This was due in part to lack of planning time, inexperience with collaborative planning, and differences of opinion as to appropriate instructional goals for students.

While the teachers in Gelzheiser and Meyer's (1990) study were generally enthusiastic about pull-in programs, it should be noted that they volunteered for the study and had a great deal of input into the type of program that was designed. The findings from this study suggest that successful implementation of a collaborative consultation model requires time alloted for consultation before and during implementation as well as attention to individual teacher and school needs (Gelzheiser and Meyers, 1990).

In a further study involving twenty-three classroom teachers, Meyers et. al., (1991) examined quantitative changes in collaboration, such as frequency and length of meeting and whether there were qualitative changes in the content of

teachers' collaboration as a result of pull-in programs. One important finding from this study is that classroom teachers involved in pull-in programs reported more frequent collaborative meetings than those using a pull-out approach. One explanation for these findings is that the structure of pull-in programs necessitates increased communication (Meyers et. al., 1991). It should be noted that the opportunity for informal contact in the pull-in programs suggests that these programs do not necessarily require unmanageable amounts of planning time (Meyers et. al., 1991).

Meyers et. al. (1991) also point out that pull-in programs foster collaboration focused on instructional planning. These collaborative meetings were viewed as improving teachers' skills in the delivery of instruction. Thus, "pull-in programs served as vehicles for staff development for both classroom and specialist teachers." p. 13. Both the classroom teachers and the specialist teachers were forced to adopt new roles and both were involved in whole class and individualized instuction. One limitation of this study is that teachers volunteered to take part in the pull-in programs but the fact that they were able to design their own programs also attributed to an increased sense of ownership (Meyers et. al., 1991).

A similar study by Giangreco et. al., (1993) examined the experiences of classroom teachers who have had a student with severe disabilities (profound retardation, severe orthopedic disability) in their class. The majority of the respondents in this study reported transforming experiences of a more positive nature and related many benefits to the students with disabilities, their classmates, and the teachers themselves. This study suggests that the direct experience of working with students with challenges is a critical factor in changing teacher attitudes. Also important, is the adequate and appropriate

support for classroom teachers from relevant support personnel (Giangreco et. al., 1993).

Maintenance and Evaluation of Collaborative Consultation Programs

In this age of eductional reform, educators must be sure that new service delivery programs meet the needs of students with learning disabilities. The question that must be asked and answered is, "Do collaborative consultation models of service delivery meet the needs of teachers and students?" School systems must engage in on-going evaluation research of new service delivery models in order to learn what elements are effective for both students, teachers, and the system as a whole (Dickinson and Adcox, 1984; Mather and Roberts,1994).

Researchers are beginning to "acknowledge the importance of investigations that focus upon the ecological relevance of consultation processes and formats." (Phillips and McCullough,1990). A few of these studies have been cited in the previous section of this chapter. Until this type of research becomes more prevalent, Phillips and McCullough (1990), advise personnel to consider informal standards in evaluating various consultation formats. These include formats that: a) maximize the collaborative ethos in schools, b) allow for optimal use of existing resources, c) offer multiple or generalizable benefits, and d) have been empirically or demonstrably substantiated. This means that school districts will need to design and then evaluate programs according to how they meet individual district and school needs.

As Graden et. al. (1985 b) suggest, the best kind of data would be data acquired from within the school district. Since the key person in any program implementation is the teacher (Keogh, 1990), data collection that measures teacher satisfaction with the service they were provided is essential (Graden et.

al. 1985 b).

In evaluating collaborative consultation programs, school districts should also pay attention to program maintenance which depends on on-going training and support. As cited in Phillips and McCullough (1990), "Effective school-based implementation requires substantial training over time, organized around demonstrably efficient instructional and support strategies (eg., observation, practice, experimentation, feedback, coaching) that promote skill acquisition and maintenance." Once essential skills have been developed, teachers need time to refine, adapt, and explore processes (Phillips and McCullough, 1990; Ainscow, 1991). As Ainscow (1991) points out, teachers should be encouraged to be reflective practioners, to learn from experience and experiment with new ways of working with their students and their colleagues.

West and Idol (1987) suggest that one line of research that has much potential would be studies of the impact of consultation on changes in teacher behaviours associated with effective teaching and increased student productivity. This is especially important since many teachers acquire skills in collaborative consultation, but they do not have the necessary skills to instruct individuals with severe learning disabilities (Mather and Roberts, 1994). As Mathers and Roberts (1994) warn, "we have a propensity in education to make and promote changes without sufficient research to support our innovations." p. 56. Special education teachers and regular education teachers must work together to implement programs that increase the learning of all students. At the same time, school districts should engage in on-going evaluation of such programs to "preserve the service delivery system for the individuals for whom it was originally created." (Mathers and Roberts, 1994, p. 56.). The following evaluation of the Diagnostic Teaching Service is one such study.

33

Chapter Three

Method

The Diagnostic Teaching Service (DTS).

The DTS is an itinerant service designed to provide service to students with learning disabilities and their teachers in twenty-four elementary schools. For the first two years of operation (1991-1993), the DTS consisted of two full time teachers and one teaching assistant. The DTS would be called in after a number of steps had been followed. These steps included involvement from the school-based team and other district personnel such as the District Resource Teacher (DRT) and/or School Psychologist (see Appendix A). While the DTS was designed to work with students identified as having specific learning disabilities, it could also be accessed for brief consultation around any student(s) regardless of formal identification. It should be noted that this particular school district has been committed to inclusion and collaborative consultation for a number of years.

Given recent provincial cutbacks in education that have affected non-enrolling support personnel, the District Resource Teacher positions that once played a central role in the DTS referral process have been eliminated. In addition, the School Psychologist role has largely been reverted to one of assessment and identification. Furthermore, one of the DTS teachers received a promotion for the 1993-1994 school year (third year of operation for the DTS) and her position was temporarily left vacant. The DTS returned to its full compliment in September, 1994.

It should be noted however, that by this time, the DTS was well established in the majority of schools involved and both the schools and the DTS felt that initial referral process could be streamlined. While the school

psychologists may still be involved in the referral process, school based teams can also make referrals for consultation directly to the DTS. Only students identified as severely learning disabled are eligible for long term involvement and/or direct service from the DTS team.

The roles and responsibilities of the DTS teachers are: a) to have demonstrated skills working with students experiencing learning difficulties and specific expertise in dealing with students with distinct learning disabilities, b) to work collaboratively with all school personnel, parents, and community members, c) to consult with the school-based team to review student needs and proceed through the problem solving process, and d) to provide an intensive diagnostic service in helping to develop a suitable educational program for students with severe learning disabilities. The roles and responsibilities of the teaching assistant are: a) to provide direct service to students under the direction of the DTS teachers and, b) to support the operation of the DTS as necessary.

The DTS was set up to provide a range of services that include: a) collaborative consultation through a team approach consisting of the classroom teacher, support teacher, DTS personnel and, in many cases, an administrator, the student and their parents. In some cases, additional district personnel such as the school psychologist and area counsellor are also involved in the collaborative process. b) direct service, either individually in pull-out situations or within the classroom setting, and, c) follow-up which includes the monitoring of a student's progress after formal intervention has been discontinued. This follow-up can take the form of, but is not limited to: telephone calls, additional problem solving meetings, classroom visits, providing resources for both student and teacher, inservice on specific strategies, further assessment and liaison support for the teacher enrolling the student in

the following school year. The DTS was designed to be flexible in order to meet individual school and student needs. The following study was undertaken by the evaluator and sanctioned by the school district and the DTS personnel in order to evaluate this service delivery model from the classroom teacher's perspective.

Diagnostic Teaching Service Personnel/ Background and Training

Both teachers in the DTS have a wide range of teaching experience and formal training. Both have taught in the elementary and secondary system in regular and special education positions. Their special education assignments have been in both special class and inclusive settings and they have worked with a wide range of students with special learning needs from students with learning disabilities to students identified as gifted and talented. Both teachers have Master's degrees, one in special education and one in education administration and both have held District Consultant positions in other school districts. In addition, both teachers hold certificates in conflict resolution from the Justice Institute. One of the teachers has also held a Ministry position responsible for the coordination of such programs as: severe behaviour, rehabilitation, gifted and talented, assessment and hospital homebound.

The DTS personnel are highly trained teachers with extensive experience in collaborative consultation. In addition to the many workshops and seminars that they attend for their own personal growth, these teachers are highly sought after provincially for the workshops they conduct on collaborative consultation, strategies for students with LD and ADD and, conflict resolution. Having teachers with such qualifications in these positions is consistent with the literature that states that consultants must be trained in collaborative consultation skills (West and Idol, 1987, Phillips and McCullough, 1990, Tindal

36

et. al., 1990 and Gersten et. al., 1991). The fact that these teachers have also held a variety of teaching positions would logically assist in their understanding of the classroom and support teacher positions when recommending specific interventions.

Subjects.

Since the DTS offers a wide variety of service depending on individual teacher and student needs, the subjects varied in the amount of contact and service they received from the DTS. This service ranged from one consultation meeting to intensive and on-going support which, for one teacher who followed a particular student as he moved through the grades, lasted into the third year of the DTS's operation.

Subjects in this study were twenty-four regular classroom teachers who had accessed the Diagnostic Teaching Service (DTS) since its inception in the 1991-1992 school year. At the time of data collection, subjects' teaching experience ranged from 2.3 to 30.3 years. A total of fourteen (58%) of the respondents indicated that they had received some form of training in working with students with special needs. Eight of these respondents (33%) indicated that they had received some formal training ranging from one University course to a diploma in special education. Six respondents (25%) outlined informal training such as district and school based workshops and ten of the respondents (42%) indicated that they had no training in working with students with special needs.

Eighteen of the respondents (75%) had some previous experience in working with students with special needs. This is probably due to the fact that this particular school district has been working towards a full inclusion model for the past five years. For the past two years, all students in the district have been educated in their home schools regardless of their categorical label or

learning needs.

Instruments.

The instruments used for data collection included a questionnaire designed to elicit teacher perceptions of the service provided to them by the DTS (see Appendix B) and a subsequent telephone interview designed to provide selected participants with the opportunity to elaborate on some of their responses (see Appendix C). The questionnaire was designed by the evaluator in consultation with District and DTS personnel who also wished to evaluate this service delivery model for students with learning disabilities.

After much discussion between the evaluator and the DTS personnel, three main questions were formulated: 1) Has the classroom teacher's involvement with the DTS improved his/her comfort level in working with students with learning disabilities? 2) To what degree did classroom teachers feel they were involved in the collaborative problem solving process? 3) Were classroom teachers satisfied with the intervention support provided by the DTS? The DTS personnel also wished to determine which elements of the service were most effective and what changes needed to be made in order to improve the service.

From the above, the evaluator designed a number of questions to elicit the information required by the DTS. A comprehensive questionnaire was developed and organized in the following manner: a) Teacher data; including years of teaching experience, training and experience in working with students with special needs, b) Information surrounding the collaborative planning sessions with the DTS, c) The type of service received from the DTS including; support teacher involvement, new skills acquired by the classroom teacher, and teacher perception of referred student(s)' benefits, d) Teacher satisfaction with the

service provided, and e) Current views regarding service for students with learning disabilities. The questionnaire was designed in this fashion in order to give a complete picture of the services provided by the DTS as well as the subjects' overall satisfaction with the DTS and inclusive models of service delivery based on collaborative consultation. In addition to providing relevant descriptive data, each question was also designed to provide data to answer one or more of the three main research questions either directly or indirectly. For example, the question that asks whether the respondents had experienced any growth or change as result of their involvement with the DTS, provides data to each of the main research questions.

The results and discussion chapter is organized according to each of the individual questions asked of the respondents. These individual questions form the basis of the subheadings to guide the reader. In the concluding chapter, the evaluator summarizes the findings according to the three main research questions.

Procedures.

The original questionnaire was piloted by two individuals and revised twice to make it less time consuming. Revisions included combining some of the questions, reorganizing the questions into the sections outlined above, and changing the format of the questionnaire from legal to letter size by reducing the spaces allocated for the responses. These revisions were based on the recommendations of the two teachers who piloted the original questionnaire and found it too cumbersome and time consuming.

When the questionnaire format was finalized and approved by the DTS personnel, the teachers who piloted the original, and the evaluator's senior supervisor, the evaluator collected the names of teachers from twenty-four

different elementary schools who had utilized the services of the DTS during its first two years of operation. The names were supplied to the evaluator by the DTS personnel in September, 1993, and included every teacher (forty-seven in total) who had accessed the DTS to date.

The questionnaire was distributed to these forty-seven teachers in November, 1993. The initial response to the questionnaire was poor, possibly due to the time of year when teachers were preoccupied with report cards. A reminder was sent out to participants in December, 1993. The responses trickled in during the new year and after two phone call reminders to the respondents who had not handed in the questionnaires, one in February and one in March, additional questionnaires were forthcoming. By the end of March, 1994, the evaluator determined that no more data would be forthcoming and proceded with analyzing the data available.

Due to the open-ended nature of the questions which were designed to provide descriptive data, the evaluator devised a system to collate the data into common themes. Responses to each question were recorded on chart paper and subsequently organized into clusters based on common themes and similar responses. The responses to these common themes were tallied and form the basis for the percentages reported in Chapter Four.

On the advice of the evaluator's senior supervisor and in the interest of time, only ten of the twenty-four respondents who completed the questionnaire were selected for telephone interviews. These respondents were randomly selected by an independent party from concealed names submitted by the evaluator. Seven of these ten respondents agreed to or had time for a phone interview. The telephone interview was designed to give respondents additional opportunity to expand on their responses to certain questions (see Appendix C)

as well as provide an opportunity to speak to issues not covered by the questionnaire. All telephone interviews, which lasted from between fifteen minutes to half an hour, were completed by the end of April, 1994. The subjects' responses from the telephone interviews, with the exception of the opportunity to provide additional comments and observations, were recorded in the main questionnaire data.

The DTS teachers were also interviewed in person by the evaluator using the same questions posed to participants in the telephone interviews. The data from their responses are recorded separately at the end of Chapter Four.

Chapter Four

Results and Discussion

Of the forty-seven teachers who were issued the questionnaire, twenty-four (51%) returned their questionnaires completed. Nine teachers (19%) declined to complete the questionnaire with reasons ranging from not enough contact with the DTS to warrant a response to not having enough time to complete the questionnaire. Four teachers (9%) returned their questionnaire without an explanation. A further three teachers (6%) were unavailable to receive the questionnaire (one was on leave, one teacher had moved out of the district and one teacher was deceased). Seven teachers (15%), despite the many reminders, did not respond at all. The teachers who returned completed questionnaires were from thirteen (54%) of the twenty-four elementary schools in the District at that time.

Throughout this chapter the evaluator often presents the actual descriptive comments given by the subjects. It should be noted that when the evaluator presents the subjects' comments, they are the most commom responses to each question and therefore representative of the data supplied in each section. It should also be noted that because of the open-ended nature of the questions, many of the respondents gave multiple answers to certain questions. Each of their responses was recorded and grouped into common themes. These multiple responses account for the discrepancy in percentages from section to section. The evaluator also chose to include individual responses that while not indicative of the majority of the respondents, nonetheless supplied relevant descriptive data of the service provided by the DTS and individual classroom teacher's perceptions of the inclusive model of service delivery for students with learning disabilities.

42

Teacher experience and their views in working with students with LD's

When asked how the classroom teachers felt about working with students with learning disabilities before their involvement with the DTS, the majority of the respondents answered similarly regardless of experience and/or training. Twenty (83%) of the respondents stated that they had reservations about working with students with learning disabilities. Their comments included: "I felt isolated with problem students who often went undiagnosed.", "I wasn't sure what to expect of them.", "I was anxious and nervous and I didn't know how to help them.", " I felt overloaded. I needed another pair of hands.", "These students were puzzling and a great challenge to the teacher.", "I wasn't sure how to integrate the students into the regular curriculum." etc. These comments, many of them from experienced and formally trained teachers, appear to indicate that there was a widespread need for additional classroom support regardless of teacher expertise. In this, they confirmed the data by Schulte et al. (1993) that classroom teachers want direct service from special education teachers when implementing inclusive models of service delivery for students with learning disabilities. Only four (17%) of the respondents indicated that they felt competent or comfortable in working with this population before their involvement with the DTS.

Planning Sessions With the Diagnostic Teaching Service (DTS)

As outlined in Table 1, twelve of the respondents (50%) indicated that the planning sessions were jointly initiated by the classroom teacher and the school support teacher. Eight of the respondents (33%) said the sessions were initiated by the school support teacher and four (17%) said they initiated the planning sessions themselves. In many cases, additional personnel were involved in the initial planning meetings. The additional personnel involved

43

in the original meeting varied from school to school depending on individual school and student needs. Of the twenty-four respondents, nine (38%) indicated that a parent(s) was involved in the original planning session, eight (33%) said that their administrator was involved, four (17%) cited District Resource Teacher involvement, four (17%) indicated that the school psychologist was present and four (17%) said that the area counsellor was also involved. Only two (8%) of the teachers indicated that the student was involved in the original planning session. This could be due to the age of the students involved, the team's conscious decision not to include the student or, simply, that the team did not think to include the student. In five (21%) of the original planning sessions, additional specialist personnel such as the teacher responsible for First Nations or the District Behaviour Team were also consulted.

If, after the initial planning meeting, it was determined that there would be long term involvement from the DTS, the subsequent planning sessions usually included the DTS teacher, the classroom teacher and the school support teacher. In situations where the DTS teacher worked extensively with a particular classroom teacher, the informal meetings occurred on a regular basis between these two teachers.

While ten (42%) of the respondents stated that the planning sessions included students' academic and social progress to date and five (21%) pointed out that formal assessment results were also discussed in the original planning sessions, eighteen (75%) of the respondents indicated that the planning sessions centered around discussion of individual student goals and developing strategies for classroom implementation. This is consistent with the goal of the DTS to provide practical support to individual students and teachers in their home schools.

Table 1:   Planning Sessions with Diagnostic Teaching Service

	Frequency of Responses	Percentage
Sample Size 24		
Sessions Initiated by:		
Classroom teacher	4	17%
Support teacher	8	33%
Jointly by classroom and support teacher	12	50%
Additional Participants in Number of Original Planning Sessions:		
Parents	9	38%
Administrator	8	33%
District Resource Teacher	4	17%
School psychologist	4	17%
Counsellor	4	17%
Student	2	8%
Other	5	21%
Content of Planning Sessions		
Individual student goals and instructional strategies	18	75%
Student progress to date	10	42%
Assessment results	5	21%
Planning Sessions Changed over Time		
Perceived change	11	46%
No perceived change	11	46%
No data provided	2	8%

Eleven (46%) of the teachers involved stated that the planning sessions changed over time. They indicated that the meetings became less formal and often consisted of shorter, spontaneous planning sessions between themselves and the DTS personnel. They also stated that as each team member developed a better understanding of the students' needs, they were able to move more quickly toward developing effective learning strategies. Of the eleven (46%) respondents who indicated that the meetings had not changed over time, the majority stated that they were satisfied with the planning sessions. One reason for this could be that the planning sessions with these teachers were already informal in nature. One could also speculate that these teachers had experience working collaboratively, were able to make their needs known from the outset, and were comfortable with working with other professionals in their classroom. Two of the teachers (8%) did not provide data for this question.

Support Received From the Diagnostic Teaching Service

When asked how the classroom teachers had been involved in the planning sessions, twenty-one (88%) of the classroom teachers felt that they had been very involved in the planning sessions and that their needs had been listened to. Specific comments included: "Together we discussed all programming. My recommendations were listened to.", " I had a say as to how these strategies would fit into my classroom.", "I was equal in a group of three which consisted of myself, the DTS teacher and the school support teacher. I gave input into how I felt in-class strategies were going. I provided information on activities planned for the next week so we could match strategies to what was occurring in class.", "I was able to state how the DTS assistance could best be incorporated into my classroom structure.", "My style, priorities in teaching, and my concern for the student were the crux of the planning.", "The DTS supported

46

what we had already tried." "The DTS personnel listened to my concerns." "I was able to put a realistic slant to the goals of individual students." "I was very involved in planning individual education plans (IEP's) for my students and developing program modifications." One respondent noted that while he/she had been involved in the planning sessions, he/she felt that the burden for program implementation was still on the classroom teacher.

One explanation for the above responses is probably due to the fact that the DTS teachers are highly trained in collaborative consultation skills and conflict resolution, have a number of years of teaching experience in both regular and special class situations and have received extensive training in working with students with learning disabilities. A further explanation is that most schools in this school district operate on the collaborative consultation model and teachers are used to being involved in the problem solving process.

School Support Teacher (SST) Involvement

The Diagnostic Teaching Service sees the school support teacher as an integral part of the process in order to ensure more long term intervention and service for the students with learning disabilities. The respondents were asked to comment on the involvement of the school support teacher in relation to their participation in the subsequent interventions.

As indicated in Table 2, twenty (83%) of the respondents reported that the school support teachers in their buildings were involved in the subsequent, regular classroom intervention support for the students with learning disabilities. Two (8%) indicated that the support teacher was not involved in the intervention support for the student(s) referred to the DTS and two (8%) of the respondents did not provide data for this section.

47

Table 2:   School Support Teacher (SST) Involvement

Sample size 24	Frequency of Responses	Percentage
SST involved in intervention Support		
SST involved in intervention	20	83%
SST not involved	2	8%
No data provided	2	8%
Type of support provided by SST		
Involved in planning sessions	20	83%
Developed IEP's	20	83%
Provided materials/resources	10	42%
Direct in-class assistance	12	50%
Out-of-class assistance	9	38%
Advantages of school support teacher involvement		
(20 respondents (83%) cited only advantages)		
Specialized training	11	46%
Prior knowledge of students	7	30%
On-going moral support	5	21%
Constant generation of new ideas	4	17%
Improved sharing of resources	3	13%
Disadvantages of SST involvement		
(4 respondents (17%) identified disadvantages)		
Too busy to provide adequate support	2	8%
Removal of student interrupted class	1	4%
Adequate support not provided	1	4%

Once again, the fact that most schools have adopted the collaborative consultation model and have effective school based teams may account for the high level of support teacher involvement in both planning and subsequent classroom intervention. Where once these school support teachers were responsible for providing these interventions directly, they are now responsible for working with classroom teachers to ensure that intervention support takes place in the regular classroom. In the cases where there was no support teacher involvement, some possible explanations could be: individual school dynamics, specific interpersonal relationships, time constraints, and/or, as in the case of one respondent, the fact that no further intervention was necessary beyond what the classroom teacher was already providing.

Type of Support Provided by the School Support Teachers

The amount of support provided by the school support teachers varied according to the individual needs of the respondents but there were some common types of support that was evident from the data. As outlined in Table 2 twenty (83%) of the respondents indicated that the school support teachers were involved in the planning sessions and in the subsequent individual education plans (IEP's) that resulted. In most cases, the support teachers actually wrote the IEP's and ten (42%) of the subjects noted that the school support teacher also provided additional or modified resources which took the load of extra paper work from the classroom teacher.

In many cases, the school support teacher provided assistance both in and out of the classroom. Twelve (50%) of the respondents indicated that the school support teacher provided in-class assistance ranging from working with individual and small groups, to "being an extra pair of hands" and, to co-planning and co-teaching units of study. Nine (38%) of the subjects cited out-of-

class support which involved direct one-to-one or small group instruction in resource rooms, liaising with district personnel, and monitoring students in school activities outside of the classroom. This wide range of service provided by the school support teachers is also consistent with the literature's claim that there is a need for a continuum of services for students with learning disabilities (Mather and Roberts, 1994).

Advantages of School Support Teacher Involvement

Additional service provided by the school support teacher is outlined in the advantages that the respondents saw in school support teacher involvement with the DTS (see Table 2). Twenty (83%) of the subjects cited only advantages to support teacher involvement in planning with the DTS and did not list any disadvantages. Of these twenty respondents, four teachers (20%) said that they would have been unable to cope without the on-going support of the school support teacher who was present when the DTS personnel were not. These teachers stated that the school support teacher assisted with the additional preparation involved and provided inspiration and encouragement on a regular basis.

As seen in Table 2, the most important advantage cited by eleven (46%) of the respondents was the special training the school support teachers had in relation to assessment, strategy development, evaluation of student progress and their knowledge of strategies to change and monitor student behaviour. These respondents stated that they felt more confident with their own observations when school support teacher testing and documentation supported their referrals to the DTS. These classroom teachers also felt that the school support teacher was able to address the social/emotional needs of the students with LD, provide teachers with checklists to monitor behaviour concerns and enforce

consistent application of behaviour expectations throughout the entire school. This is especially important since the school support teacher may be involved with more than one teacher over the same student and certainly sees these students in the playground, in the hallways and in disciplinary situations where the regular classroom teacher may not be involved. Classroom teachers also saw the school support teacher as the ideal liaison with the DTS, parents, and other personnel involved.

A second advantage of school support teacher involvement as seen by seven (30%) of the respondents is that in most cases, the school support teacher had prior knowledge of the students from previous years which helped in planning appropriate programs. This knowledge could also be transferred to subsequent teachers which would ensure continued service for the student and the teachers involved in the future and thus facilitate inclusion. Four of the teachers in this study stated that they had already benefitted from the fact that the school support teacher had worked with the referred students for a number of years. One respondent indicated that the school support teacher's knowledge of the student and the transition process in place in the District, ensured that this information would also be passed on to the secondary school when the student left the elementary system.

Additional advantages cited by respondents included: on-going moral support (five respondents-46%), constant generation of new ideas (four respondents-17%), and the improved sharing of resoures in the school (three respondents-13%). One respondent also noted that having the school support teacher work in the classroom on a regular basis helped the school support teacher to better understand individual students' needs in relation to a regular classroom setting. This teacher felt that the resulting planning sessions were far

more effective for all concerned.

The above information supports the DTS's belief that the school support teacher is an integral part of the service to students and teachers. The classroom teachers' responses also reinforce the literature's claim that collaborative consultation is most effective when there is shared responsibility and on-going support for the classroom teacher (Gelzheiser and Meyers, 1990, Philips and McCullough, 1990, and Giangreco et. al., 1993).

Disadvantages of School Support Teacher Involvement

Only four (17%) of the respondents cited any disadvantages to school support teacher involvement in planning with the DTS (see Table 2). Two of these four teachers indicated that too many appointments had to revolve around the school support teacher's already busy schedule and that the school support teacher did not have enough time to provide direct service to the student(s) or work with the classroom teacher as often as the teacher would like. These statements are also consistent with the literature in that one of the biggest barriers to collaborative consultation is lack of planning and meeting time (Phillips and McMullough, 1990, Kauffman and Trent, 1991, Robinson, 1991). Time must be set aside for consultation and school support teachers should not be overloaded to the point where they are unable to provide the necessary service to classroom teachers.

One respondent stated that the occasional removal of students from class interfered with class and group learning. Another respondent felt that he/she had not received adequate support and that the school support teacher was reluctant to work with the DTS personnel. This could be due to the individual school support teacher's level of training in collaborative consultation skills and his/her own comfort level in planning and working with other adults or, they

may in fact, have been reluctant to work with the DTS personnel.

Teacher Growth and Change As a Result of DTS Involvement

The evaluator and the DTS personnel were interested to know if the respondents had experienced any professional growth or change as a result of their involvement with the DTS. Specifically, they were interested to determine whether or not the classroom teachers had: acquired any new skills, changed their teaching style, and changed their views in working with students with learning disabilities (see Table 3).

Table 3:   Teacher Growth and Change

Sample Size 24	Frequency of Responses	Percentage
Skills		
Teachers acquired new skills	17	71%
Teachers did not acquire new skills	7	29%
Teaching Style		
Change in teaching style	11	46%
No change in teaching style	10	42%
No data provided	3	12.5%
Views in Working with Students with LD's		
Views changed	8	33%
Views did not change	14	58%
No data provided	2	9%

Classroom Teachers' Perceived Increase In Skill Development

Seventeen (71%) of the respondents indicated that they had acquired new skills. Many of the respondents said that the skills they acquired were too many to list but outlined such strategies as: the use of rebus stories, cooperative learning techniques, the use of peer tutors (secondary students trained by the DTS), picture dictionaries, use of tapes, webbing, Listen, Sketch and Draft, story maps, SLAM math program, games for drill and reinforcement, better use of visual aids and concrete materials, check lists to organize materials, techniques to keep students with ADHD on task, strategies to develop fine motor skills, 5+2 listening skills, fat and skinny questions, story maps, wanted posters, modifying text book material and developing IEP's. Also mentioned were skills of tolerance, patience and understanding of the needs of students with learning disabilities.

Four (17%) of the subjects said that they were aware of some of these strategies before but had not used them. When the DTS modelled these strategies in various classrooms, these teachers saw how easily they could be incorporated into what was already happening in the classroom. These respondents also stated that they still use these strategies on a regular basis.

Seven (29%) of the respondents commented on the fact that they are now able to modify lessons and develop IEP's for students more easily. As a matter of course, they provide a variety of ways for students to show their knowledge. One teacher stated, " I now use more hands on techniques so students have different ways of showing me what they know." Another teacher indicated that she is more aware of individual strengths and weaknesses that can be monitored and improved given an overall plan, support, and time to deal with problem areas. A further respondent indicated that he has more insight into what is

possible in so far as alternatives for program modication are concerned.

One teacher, who was new to the profession at the time of her first involvement with the DTS, summed up her experience in the following way: " I learned skills too many to list. Basically, I learned ones to help students think about reading, become purposeful readers and ones to help students organize their thoughts before and during writing. Most were demonstrated to the whole class and I still use them. I learned that it was also necessary to assess skills based on what we do in class. It showed me that the students had skills I didn't know about. Now I do this for all my students... I have a bigger bag of tricks... Before, I wasn't clear on why I was doing certain things but collaborative planning sessions with the DTS helped me to develop clear plans for the kids."

The above comments clearly indicate that the collaborative planning sessions with the DTS resulted in increased skills for the majority of the respondents. This is possibly due to the fact that the DTS worked directly with the classroom teachers and modelled how these strategies could be incorporated into their classrooms based on individual student(s)' need and teachers' style and comfort level in working with support personnel in their classrooms.

Of the seven (29%) respondents who indicated that they did not develop new skills as a result of their involvement with the DTS, one respondent stated that she was already aware of these strategies and the DTS just reinforced what she knew. Another teacher stated that while he planned the intervention for the student with the DTS, the DTS personnel worked directly with the student. The additional subjects who responded negatively to this question did not give an explanation to their response.

Change in Teaching Style

Respondents were also asked whether or not their teaching style had changed as a result of their involvement with the DTS. While three (13%) of the subjects chose not to answer this question, eleven (46%) of the respondents indicated that their teaching style had changed and ten (42%) indicated that it had not.

Of the respondents who stated that their teaching style had changed, specific comments included: "My teaching has become more focused for those students who need step by step, simplified instructions.", "I have become more relaxed by being able to look at what is really important such as students interacting vs a quiet classroom." ,"I learned more about the power I had to include students with special needs in grade appropriate learning. Most strategies were useful for the entire class so I was encouraged to plan most of my activities to be open ended to allow for enrichment as well as adjustments...The whole class benefits.", "I am more relaxed in exploring whatever works. I'm more open with support personnel and other colleagues about concerns and frustrations....reinforced the idea that several heads are better than one in problem solving.", "I have developed more tolerance and patience.", "I have refined techniques that I already use.", "I look for more ways for students to hook information into long term memory.", " I'm more aware of the needs of students with ADD and have modified my teaching style accordingly.", " I am more equipped with a variety of resources that can be used with other students with special needs." "Our growth as teachers is always a source of change. I can't say specifically, but undoubtedly having others involved inspires new techniques into my teaching."

These comments would indicate that for approximately half of the

respondents, collaborative planning with the DTS has permanently affected the way that they teach. This could be due to the fact that these teachers now feel they have developed new skills to accommodate students with learning disabilities in their classrooms. Another explanation could be that collaborative planning has increased their comfort level in working with other adults, and that with support, they feel they are more able to accommodate individual differences in their classrooms.

Of the ten respondents who indicated that their teaching style had not changed, six of them did not provide an accompanying statement. The ones that did, varied in their explanations. One respondent indicated that while her teaching style hadn't changed, her awareness had. Another teacher stated that she had always stayed up to date on different teaching methodologies and she understood a great deal from the course work she had undertaken at SFU. Another stated that he had always attempted to accommodate individual differences in his classroom. A further respondent indicated that while he continues to use some of the strategies, he cannot always integrate students with LD in his classroom. It is possible that the six teachers who did not provide an explanation for their response were making the appropriate accommodations for their students all along and therefore saw no reason to change.

This wide range of responses appears to support the literature in that individual teacher training, experience and level of support provided will have an impact on whether or not classroom teachers feel they can accommodate students with special needs (West and Idol, 1987, Tindal et. al, 1990, Meyers et. al.,1991, Giangreco et. al., 1993). Some of these teachers are highly trained and their teaching style has always accommodated individual differences.

<u>Changing Views in Working With Students With Learning Disabilities</u>

Teachers were also asked if their views in working with students with LD's had changed as result of their involvement with the DTS. Two (9%) of the respondents did not answer this question. Eight (33%) of the subjects indicated that their views had changed. The majority of these teachers stated that they are now more aware of these students' instructional needs and have some strategies that can help them be more effective with this student population. They also said that they are more confident in their abilities and comfortable with having a student with special needs in their class. One respondent however, stated that, "I'm more confused than ever. I feel even less effective than ever...I used to think we could `fix them quick'."

Fourteen (58%) of the respondents stated that their views had not changed but the majority of these teachers did not explain their answer. Some possible explanations for their responses could be, as one respondent indicated, that her views had changed as result of mainstreaming and not as result of the involvement of the DTS. This teacher did not explain what her views were, however. A further explanation could be as one teacher stated, that he has "never minded working with students with learning disabilities."

Teachers' Perceptions of Change in the Students Referred to the DTS

While this study is focused on teacher perceptions of the support provided to them by the DTS, an important element of this evaluation is whether or not classroom teachers perceived positive changes in the students referred to the DTS. Eighteen (75%) of the subjects noticed positive changes in the target students. They indicated that the students were more successful, less frustrated and had increased self esteem. Some teachers stated that this increase in self esteem resulted in improved behaviours as well. They noticed that their

58

students were more aware, self directed and self reliant. One respondent noted that the student she was working with, "felt more positive, encouraged and capable. He became interested in his learning and progressed farther than I ever imagined. He takes risks continually, is proud of his accomplishments and loves to help others with difficulties." Other respondents stated that the students felt more a part of the class and displayed a more positive attitude towards school in general. They also a noticed an increased level in skill development.

These comments would suggest that the target students did benefit from the extra support provided by the DTS. Part of this success could possibly be attributed to the collaborative nature of this support and the fact that classroom teachers have developed new skills with which to work with these students on an on-going basis. Another explanation could be that classroom activities were now geared to the students' ability level and the resulting improved self confidence and behaviours also allowed the teachers to see these students in a different light.

Of the six (25%) respondents who indicated that they had seen no changes in the students as a result of the DTS involvement, only two offered an explanation. One respondent stated that she only noticed any changes when the student received pull-out support. This comment could be due to the individual's own comfort level in working collaboratively with others, her views on inclusion, or the particular nature of the student's disability which may require substantial individualized instruction.

Another respondent indicated that the student involved showed no positive growth because he had too many home problems. It may well be that in some cases, the outside influences such as particular home situations will need to be addressed first before the student is able to concentrate and work with any

59

school intervention. One would hope that a collaborative team including the school counsellor would be able to address these needs and involve the appropriate district and inter-ministerial personnel.

Teacher Satisfaction With The DTS

Teachers were asked to rate their satisfaction with the DTS (see Table 4) on a four point Lickert scale (Above average - average - below average - poor). One of the respondents chose not to rate the DTS and two of the responses were not tabulated since more that one rating was checked off. Nine (38%) of the teachers rated their satisfaction with the DTS above average. Ten (42%) of the respondents rated their satisfaction as average. One respondent (4%) felt the support was below average and one respondent (4%) felt the support was poor. It should be noted that there was no observable relationship between teacher experience and training and their satisfaction with the DTS.

Criteria Used to Rate the DTS

Teachers were also asked to identify the criteria they used to rate the DTS. While these criteria varied from teacher to teacher and most of the respondents cited more than one criterion upon which they based their evaluation, twelve (50%) of the respondents indicated that they based their rating on evidence of student success and twelve (50%) said they based their rating on the time available for individual student support. As many of the teachers indicated in the previous section, they noticed positive growth in the students referred to the DTS. They also appreciated the extra help available to the students. One respondent noted, however, that she did not receive any help for the student and therefore observed no positive change in the student.

Table 4:   Teacher Satisfaction with the Diagnostic Teaching Service

	Frequency of Responses	Percentage
Sample Size 24		
Subjects' rating		
Above average	9	38%
Average	10	42%
Below average	1	4%
Poor	1	4%
No observable data	3	13%
Subjects' Criteria Used to Rate the DTS		
Evidence of student success	12	50%
Individual student support	12	50%
Friendliness/Sincerity/Availability of DTS	11	46%
Specialized knowledge of DTS personnel	5	21%
Individual teacher growth	4	17%
Time available for planning	1	4%
Benefits of the DTS		
Knowledge and expertise	10	42%
Extra hands-on assistance	9	38%
Personal and professional growth	7	30%
Planning time with classroom teachers	4	17%
Official identification of student	2	8%
Increased student self-esteem	1	4%
Parental satisfaction	1	4%
No benefits	1	4%
No data provided	2	8%

Eleven (46%) of the teachers also stated that they based their rating on the friendliness, sincerity and availability of the DTS personnel. This included recognition of the individual classroom teacher's needs, the ability of the DTS to work unobtrusively in the classroom, and the level of cooperation between the DTS and the teacher. These comments are also consistent with the literature which points out that in order for collaborative consultation to be effective, consultants must be attuned to individual teacher needs and offer support based on individual teacher and school priorities (West and Idol, 1987; Pugach and Johnson, 1989; Tindal et. al., 1990).

Five (21%) of the subjects pointed out that they based their rating on the knowledge the DTS had about: the various programs offered, strategies, and resources available. While the literature suggests that consultants will need to shed their "expert" image, (West and Idol, 1987; Pugach and Johnson, 1989), they nonetheless will need to be seen by their colleagues as having the expertise to deal with this challenging population .

Four (17%) of the respondents also indicated that their rating was based on what they had learned as a result of their involvement with the DTS. This included a repertoire of strategies and comfort level in working with students with learning disabilities. As previously noted, a majority of the teachers indicated that they had acquired a number of new strategies which they have continued to utilize. These comments support the literature that suggests classroom teachers need to be provided with practical strategies that can be implemented given their level of expertise and particular classroom situations (Phillips and McCullough, 1990; Tindal et. al., 1990). Only one respondent(4%) stated that she based her rating on the amount of time available for planning. This is surprising given the literature findings that lack of planning time is one

of the main drawbacks to collaborative planning (Phillips and McCullough, 1990, Kauffman and Trent, 1991, and Robinson, 1991). It could be that the respondents in this case felt that the nature of the support provided by the DTS allowed for adequate on-going planning. Another explanation could simply be that the respondents did not think to include this element in their criteria for rating.

Benefits of the DTS

Teachers were asked to outline their perceptions of the benefits of the DTS. The majority of the respondents cited more than one benifit of the service. Ten (42%) of the respondents indicated that they appreciated the knowledge and expertise of the DTS personnel and the support and understanding they provided. Nine (38%) of the teachers also indicated that they appreciated the extra "hands on" help for themselves and the students and the specialized service to the referred student. Seven (30%) of the teachers indicated that one of the benefits was the personal and professional growth that they had experienced. This included knowledge about specific disabilities, new ideas and strategies, awareness of additional resources, and "on the job" training in working with students with special needs.

Four (17%) of the respondents stated that another benefit of the DTS was the DTS involvement in planning time with the classroom teachers. They indicated that this allowed them to see problems in new ways which resulted in more options for problem solving. They appreciated the shared commitment which is consistent with the literature's claim that joint responsibility for problem solving is essential to effective collaborative consultation.

Two (8%) of the respondents said the benefit of the DTS involvement was the subsequent formal indentification of the student involved. One respondent indicated that as a result of the involvement with the DTS, the student he was

working with became officially identified. Another respondent stated that subsequent identification of the student resulted in more support and planning time for the student and teacher.

One teacher (4%) noted that the increased self-esteem in his student was a benefit of the service and another respondent (4%) said that the parents of the student referred to the DTS were very satisfied with the extra support provided to their child.

Two (8%) of the respondents chose not answer this question and one teacher (4%) indicated that there was no benefit to the DTS and that the previous pull-out model (DTC) provided more support for the student. A number of possible explanations can be made for this statement. One could be that this teacher perceived that the students received more support from an intensive pull-out program. In turn, her perception could have come from the type of support she has received on an on-going basis from the DTS and/or school based support personnel. Another possible explanation could be her own comfort level in working with students with special needs or her comfort level in working with other adults in the classroom. A further possible explanation could be that the needs of the student in question required extensive individualized instruction which supports the literature's claim that educators must provide for a continuum of services to meet the needs of individual students (Reynolds et. al., 1987, Keogh, 1988, Mathers and Roberts, 1994).

Teacher Recommendations for Improvements in the DTS

As the literature states (Halgren and Clarizio, 1993, Mathers and Roberts, 1994, McLeskey and Pacchiano, 1994), school districts will need to engage in on-going evaluation of the services provided for students with special needs especially when designing new models of service delivery. The DTS personnel

subscribe to this belief and wanted to know how they could improve their service to students and teachers. Respondents were therefore asked to make recommendations for improvements to the DTS (see Table 5).

Table 5: <u>Recommendations for Improvements to the Diagnostic Teaching Service</u>

Sample Size 24	Frequency of Responses	Percentage
Teacher Recommendations		
Increased DTS personnel	8	33%
More in-class support	7	30%
More follow-up or referred students	2	8%
More peer tutors	1	4%
Spend more time with individual student	1	4%
How These Improvements Could be Implemented		
Increased funding	11	46%
Individual responses (see discussion)	6	25%
No data provided	8	33%

Eight (33%) of the respondents said that there was a need for more personnel in the DTS so that they could have more access to this valuable service for longer periods of time. This comment is consistent with the teachers' overall satisfaction with the DTS but there was a widespread request for more of this type of support for classroom teachers and their students. Seven (30%) of the subjects also stated that they would appreciate more in-class support from the DTS including more modelling of strategies for classroom teachers. These

comments also support the need for more teaching and paraprofessional personnel in the DTS.

Two respondents (8%) stated that they would like to see more follow-up on the students referred to the DTS. They would like to see regular reviews of students' progress to determine if the plans are still working and benefitting the students. This is especially important as students move from grade to grade, teacher to teacher and, in some cases, from school to school. It should be noted that the DTS originally had a plan in place to track students on an on-going basis but with cutbacks in District personnel and in the DTS itself, follow up for individual students has become more difficult.

One respondent (4%) had been involved in a pilot project designed by the DTS where they trained high school students to act as peer tutors to students with LD in the elementary schools. He stated that this was a valuable experience for all concerned and would like to see this service expanded. While this could be one economical way to expand the DTS (as well as providing a valuable experience to high school students), it would require additional DTS personnel to provide the training.

One teacher (4%) indicated that the DTS needed to know the student on a more personal basis and would therefore have to spend more time with the student. This respondent eplained that she liked the original DTC pull-out model for this reason because she felt more contact time with the student was available through this model.

Another respondent (4%) stated that there needs to be more time spent in diagnosing the students' difficulties and preparing the appropriate resources. She also said that she would appreciate more guidance in the implementation of the IEP. While this is certainly a role that is played by the DTS, the in-school

support teacher could also provide on-going support in these areas.

When teachers were asked how some of these improvements might be implemented, eight (33%) of the respondents chose not to answer the question. No explanation was given for their lack of response. Eleven (46%) of the subjects said that more funding was needed to expand the service. Six (25%) of the respondents gave individual responses that included: more student assessment, more direct information to classroom teachers about the type of service provided by the DTS and what they are prepared to do for the classroom teacher, more direct involvement with the students, and more frequent evaluation of the service by DTS personnel. One respondent stated the service could be improved by returning to the DTC pull-out model. Another added that there needed to be more recognition at the District level of the "immense value of the DTS". While this may be true, recent cutbacks to education have affected a large number of support programs and non-enrolling teachers in many school districts. The reality of the financial situation in this province will likely mean that additional resources are not forthcoming. The question to be asked then is, can we continue to support students in an inclusive model with ever decreasing resources to students with special needs and the teachers who work with them?

Teachers' Views Re: Current Service Delivery Model For Students With LD

In this final section, teachers were asked to outline their views regarding the current service delivery model for students with learning disabilities (see Table 6). Most specifically, teachers were asked to comment on the advantages and disadvantages of the inclusive service delivery model for both the students and the classroom teachers. Teachers were also asked to identify the conditions that need to be present for students with LD to be successful in regular classroom placements. The teachers who participated in the telephone interviews were

also provided the opportunity to offer additional comments and observations beyond the scope of the questions on the questionnaires.

<u>Advantages for Students</u>

Twenty-one (88%) of the respondents indicated that one advantage of inclusive service delivery models for students is that students are not segrated from their peers and therefore are not singled out or treated differently. These respondents stated that because these students now feel they are a part of the class, they exhibit more positive self-esteem which contributes to improved overall success.

Another advantage as cited by ten (42%) of the respondents is that students with LD were provided more opportunity to socialize with their peers. This interaction resulted in improved social skills for the students with LD and often resulted in more acceptable behaviours. These teachers stated that students developed more coping skills and were able to be contributing members to large group settings. These respondents also noted that the positive role modelling exhibited by classmates extended beyond the social aspect to what can be expected academically in the classroom.

Four (17%) of the respondents also indicated that the advantages of inclusion extended beyond the LD population. They stated that all students benefitted as they worked cooperatively with others. Typical classmates more academically inclined were able to see that other students needed help but that, when given assistance and alternate ways to display their knowledge, they could be successful. These teachers stated that this realization spread beyond the classroom and positively affected the personal lives of all students outside of the classroom.

Table 6:   Teachers' Views of the Current Service Delivery Model for Students
            with Learning Disabilities

Sample Size 24	Frequency of Responses	Percentage
Advantages for Students		
Students were not segregated	21	88%
More socialization with LD's peers	10	42%
Advantages to typical classmates	4	17%
Support provided in regular classroom	4	17%
Student opportunities to show success	2	8%
Advantages for Teachers		
Professional growth	17	71%
Additional assistance	8	33%
Personal satisfaction	3	13%
No advantages	3	13%
Disadvantages for Students		
More direct service	10	42%
Students frustrated in regular classroom	7	30%
Recent funding cutback	4	17%
Teachers who lack experience	3	13%
No disadvantages	2	8%
Disadvantages for Teachers		
Inadequate time provided	22	92%
Added stress on classroom teacher	11	46%
Lack of training and funding	3	13%
Support not always available	2	8%
Parental expectations/lack of involvement	2	8%
No disavantages	2	8%

Four (17%) of the respondents also said that one advantage was the specialized service provided to the students and the fact that they received help on assignments that the whole class was doing. These teachers stated that the support provided in inclusive models is consistent with what is happening in class and students learn strategies that will help them be successful in realistic environments such as the regular classroom. One teacher noted that students were more likely to transfer strategies from one content area to another when these strategies were taught and reinforced in the classroom on an on-going basis.

In addition, two of the respondents (8%) stated that inclusion also offers students with LD the opportunity to show their classmates areas in which they can be successful. They noted that by providing opportunities for students to show their knowledge in different ways, students with LD can often keep up with their classmates and even excel in some areas.

Advantages for Teachers

Seventeen (71%) of the teachers said that one advantage of inclusion for teachers was the professional growth they experienced as a result of programming for students with special needs. One teacher stated that she learned a lot about these students' needs as people and that all kids have special talents. Other teachers stated that their awareness has been enhanced and one teacher noted that she is now "teaching students instead of the curriculum." This different way of thinking and problem solving, as one teacher pointed out, could be applied to all students and not just students with special needs.

Eight (33%) of the teachers identified the extra assistance provided as an advantage for classroom teachers. Teachers said that the additional resources in the classroom were very helpful and benefitted all the students in the classroom.

70

This assistance included team teaching by the DTS and/or SST and the teaching assistant support available to most teachers in the inclusive model. These teachers also felt that assistance provided in the classroom meant less disruptions for them as the classroom teacher. They didn't have to plan totally separate programs and schedules or worry about students coming and going out of their classroom at various times of the day.

Three (13%) of the respondents indicated that another advantage was the satisfaction they experienced when they noticed the gains made by individual students. Since these gains were made in the regular classroom setting under the direction of the classroom teachers, it follows that teachers' confidence in working with students with challenges would be enhanced. As one teacher stated, "I'm not scared anymore about my ability to include students with LD."

An additional three (13%) respondents, however, did not see any advantages of inclusion for classroom teachers. As one teacher noted, "There aren't any. I didn't think anyone thought of the teacher when they thought of the inclusive model." Still another stated, "Although I fully agree with the inclusive model, it is difficult to think of advantages gained by the average classroom teacher." It should be noted that all teachers in this category did see some advantages of inclusion for the students. One can only speculate then, that perhaps in their particular situations, they did not receive the type of support they required. This could possibly be due to the fact that these teachers have too many students with special needs in their classes and the support from the DTS and/or the school support teacher may not be enough.

Disadvantages for Students

Ten (42%) of the respondents indicated that some students with LD still needed more one-on-one assistance for skill development than is provided in

the inclusive model. One teacher noted that it was almost impossible to work in the lifeskills component that some of the students with more challenging needs required. These teachers also said that there was still a need for some pull-out service for these students which further supports the literature's claim that there remains a need for a continuum of services for students with special needs (Reynolds et. al.,1987, Keogh, 1988, Mathers and Roberts, 1994).

Seven (30%) of the teachers stated that they were still concerned about some of the students' frustration level in the regular classroom setting. They noticed that some students were overwhelmed with the workload and in some cases were often distracted by their peers. Peer pressure was seen to be a possible disadvantage by certain teachers who noted that students with LD can be embarrassed by the modifications made to their program. One respondent noted, however, that this embarrassment can be avoided if handled appropriately by the classroom teacher and a variety of strategies and learning styles are accommodated in the classroom.

While two (8%) of the respondents stated that there were no disadvantages for students with special needs, four (17%) of the respondents stated that the recent cutbacks in funding, which have affected support services, is a definite disadvantage to all students in inclusive settings. These cutbacks have affected District support positions, the DTS, and the school support teachers. These four teachers noted that assistance is not as consistent or intensive as it used to be. They also pointed out that because of the cutbacks, the school support teachers were spending more and more time with students with the most challenging needs and that there was no time for the less challenging students who also required learning assistance.

A further disadvantage to the students as cited by three (13%) of the

respondents could occur if these students were placed with teachers who lack expertise in working with students with LD. As one respondent noted, "if teachers do not know how to approach or plan for these students, they are unlikely to make allowances for their learning needs". As these comments suggest, teacher expertise and comfort level should be considered when placing students with special needs in regular classroom placements. Also to be considered is the need for adequate and on-going support to the teachers who work with these students.

Disadvantages for Teachers

Twenty-two (92%) of the respondents indicated that one disadvantage for teachers is the amount of time needed to program for these students. This included planning and preparation time and the actual amount of teaching time required by these students. These respondents felt that they spent too much time with students with learning disabilities to the detriment of the other students in their class. These teachers noted that they were being spread too thinly, that they had too many things to juggle, and as one respondent put it, his self concept as a teacher was negatively affected.

Two (8%) of the teachers noted that the support was not always there when they needed it while eleven (46%) of the respondents felt that the planning for support, such as time spent in meetings, preparation of materials and the supervision of a teaching assistant, was an added stress on the classroom teacher. In some cases, depending on the make-up of particular classes, the classroom teachers were faced with working with a variety of different support personnel which made coordination of services difficult. As one respondent stated, "Sometimes I feel like I'm a revolving door with the school support teacher, DTS personnel, the Behaviour Team personnel, and teaching assistants

all coming and going. Scheduling can be difficult. Sometimes there are too many experts in the room."

This comment is understandable given the extent and amount of services provided to this particular teacher. One could question the particular make-up of this teacher's classroom. One could also suggest that these services could be more adequately coordinated by school-based personnel so as not to duplicate services and have an abundance of resources in one classroom.

Three (13%) of the teachers stated that a disadvantage of inclusion for classroom teachers was the lack of training and funding provided for in-service. One teacher noted that inclusion assumes that teachers are educated in dealing with students with learning disabilities. This same teacher also stated that inclusion assumes that teachers will ask for help when many do not.

Another disadvantage as cited by two (8%) of the respondents is the expectation of some parents who expect the classroom teacher to 'fix` the problem or as these respondents also indicated, the lack of necessary parental involvement in intervention.

It should be noted that two (8%) of the respondents stated that there were no disadvantages to classroom teachers but they clarified this statement by stating this was due to the support they received and the personalities they worked with. This is not always the case and as one respondent indicated, "I suppose in some instances personalities might clash or two diverse teaching styles might conflict." This comment also supports the literature that states that individual teaching style and personalities must be taken into consideration as much as possible when planning collaborative consultation models of service delivery. Training in consultation skills is also needed in addition to training in working with students with special needs (West and Idol, 1987; Phillips and

McCullough, 1990; Tindal et. al., 1990; Gersten et. al., 1991).

Necessary Elements for Successful Inclusion of Students with LD

Additional Resources/Personnel.

Seventeen (71%) of the respondents stated that more resources, including increased personnel, will have to be provided if students are to be successful in regular classes (see Table 7). In addition to increased DTS personnel, these teachers felt that additional school support teachers and teaching assistants were even more important. They stated that this type of resource was essential to ensuring necessary and on-going support to teachers and students in regular classroom placements. One respondent noted that there was also a need for increased peer tutor support.

Table 7: Necessary Elements for Successful Inclusion of Students with Learning Disabilities.

Sample Size 24	Frequency of Responses	Percentage
Additional resources/personnel	17	71%
Planning time	8	33%
Class size and composition	7	29%
Teacher attitudes	6	25%
Non-threatening classroom atmosphere	4	17%
In-service	4	17%
On-going skill development	3	13%
On-going evaluation	3	13%

Five of these teachers also expressed a desire for more support from the parents of these students. They felt that many of the students' individual

programs required encouragement and on-going follow up at home. Meeting time with parents and eliciting the essential support, was seen as difficult to accomplish by some teachers. Teachers also felt the need to address the different home situations and to help parents understand the nature of specific disabilities.

Many of the respondents saw a need for additional District services which, in addition to providing more personnel, included additional funding to pay for the extra materials and supplementary resources often needed by students with learning disabilities.

It should be noted that these comments were made at a time when funds to school districts had been cut and many schools had been faced with a decrease in resources, including support personnel. Since all of the schools in question had already adopted a full inclusion model, some of the teachers may have been expressing their frustration at having to assume more and more responsibility for these students without adequate support.

Planning Time.

Eight (33%) of the respondents indicated that more planning time was a necessary condition for students with LD to be successful in regular classroom placements. These teachers stated that adequate time had to be provided for meeting time with support personnel. This included the initial pre-planning meetings to discuss the referral and the on-going planning sessions necessary to ensure program success.

These teachers indicated that they preferred informal and on-going planning to a more formalized structure because formal planning took even more time away from their already busy schedules. They noted however, that informal planning time still needed to be planned and provided for.

These respondents also stressed the need for a collaborative structure that emphasized team work and open communication. They also noted that the strategies developed had to be applicable to on-going instruction and activities in the classroom. Finally, teachers stated that more preparation time had to be provided for teachers to develop and implement these programs.

Class size and composition.

Seven (29%) of the teachers said that class sizes had to be smaller when including students with special needs and that more space had to be available to provide for a variety of programs and learning styles. With smaller class sizes, teachers felt that they would be able to spend more time with the students with LD as well as meet the needs of the other students in the class.

These teachers were also concerned with class composition. They stated that they had students in their classes who needed extra assistance but were not formally identified as having special needs. This could be due to the fact that these students did not meet Ministry of Education criteria for indentification or they may have been on a waiting list for a formal assessment. Therefore, these students may not be taken into consideration when determining supports needed for a particular school or classroom. However, these students often require as much support as a student with LD or they present behaviour problems that can require a large amount of support. School support personnel and administration should take these students into account as well when designing class lists. Unfortunately, class size limitations and the number of appropriate grade levels available at any one school do not always afford the necessary flexiblilty to move students around.

Teacher Attitudes.

Six (25%) of the respondents stated that in order for inclusion to be

successful, teachers had to be willing to accept the challenge and committed to making inclusion work. This statement implies that all teachers would have to be willing to work collaboratively with others and utilize a variety of teaching strategies in their classroom. While this statement may be true, when a district adopts an inclusive philosophy unilaterally, it follows suit that not all teachers will have the same training or be at the same comfort level in working with students with special needs. This must be taken into account when developing an inclusive model and special consideration must be made for teachers who need more time, training, and support. This could be done at the school level where support teachers and administration have an understanding of the needs of the teachers in their schools, given that adequate supports are provided.

Develop a non-threatening atmosphere in the classroom.

Four (17%) of the respondents said that in order for inclusion to be successful, teachers had to foster a non-threatening atmosphere in the classroom. These teachers agreed that the classroom needed to be seen as a place where a student could take chances without being laughed at, where self esteem was built up and learning was looked upon as an enjoyable experience. These respondents also noted that it takes work to cultivate this kind of classroom, that teachers must model and promote acceptance of individual differences. Teachers in inclusive classrooms must also teach positive social behaviours including tolerance and acceptance of others. While much of this can be done incidentially and many teachers are effective at fostering this type of atmosphere, still others require training and experience in incorporating these fundamentals into their classroom structure. Also, while the long term benefits of tolerance of others can be enjoyed by all, such modelling can take time away from regular classroom instruction.

<u>In-service.</u>

Four (17%) of the teachers also indicated that there was a need for on-going in-service to build on their newly acquired skills. They felt that both formal and informal training was essential and that money had to be provided for teachers to attend workshops. This included release time as well as the fees required for some of the workshops and seminars.

<u>On-going skill development.</u>

Three (13%) of the respondents also saw a need for on-going skill development on the part of the students. While some students can receive this instruction in the regular classroom situation, still others will need a contiuum of services, including pull-out instruction, based on individual student needs. Skills to be developed should also be recorded in the student's IEP which should be up-dated regularly and follow the child from year to year to ensure continuity. While this is one way to ensure on-going skill development, it is also time consuming and requires a great deal of organization. If school support teachers and classroom teachers have too many students who need this type of support on their case load, adequate record keeping often becomes impossible to maintain.

<u>On-going evaluation.</u>

Finally, three (13%) of the teachers felt that if inclusion was to be a successful experience for students, there had to be on-going evaluation of the programs designed for these students. These evaluations should include whether or not adequate supports are available to both students and teachers. This study is an example of a program evaluation designed to determine one service delivery model's effectiveness. School Districts are encouraged to implement or sanction program evaluations when implementing new

programs for students and make changes or improvements based on the data provided(Dickinson and Adcox, 1984; Mather and Roberts, 1994).

Additional Comments and Observations: Telephone Interviews

The respondents who participated in the telephone interviews were given the opportunity to expand on some of the questions asked in the questionnaire (see telephone interview questions Appendix C). The data provided in the interviews were recorded in the relevant sections throughout this chapter. The telephone interview respondents were also provided the opportunity to make additional comments and observations that may not have been covered in the questionnaire. This section deals with their comments that have not been previously recorded. It should be noted that of the ten respondents randomly selected for telephone interviews only seven made themselves available for the interview.

Two of the respondents interviewed indicated that their contact with support personnel and the resulting modifications that they now use have made them better teachers and their whole class benefitted in some way because of this. Four of the teachers interviewed however, said that they were still concerned about the amount of time spent on identified students in relation to the time spent with other students in the class. These teachers stated that other students needed extra help as well but that there wasn't enough support time for these students.

In the inclusive model, students who would typically have received learning assistance often do not receive this service since the support teacher's time is taken up by the more challenging needs of the students identified for special programming. This includes students in all categorical labels including students identified as dependent handicapped (multiply challenged students

with extensive personal care needs). It would appear that the funding supplied by the Ministry for these students may not be adequate to support the inclusive philosophy since these resources must now be dispersed to neighbourhood schools instead of to the former District based programs.

It should also be noted that current contract clauses that protect class size and provide preparation time for classroom teachers have, in some cases, affected support time in certain schools. This is due to the fact that non-enrolling teachers (eg. school support teachers who do not register specific groups of students), have had to provide the preparation time for their colleagues which has come out of monies/time earmarked for students at risk. This again, is a result of the recent cutbacks to education which have come when more and more students appear to be in need of support services.

DTS Personnel's Obversations

The two teachers in the DTS were provided the opportunity to comment on their perspective of the DTS by answering the same questions posed to the respondents in the telephone interview. The DTS teachers were interviewed separately, in person, by the evaluator.

New Skills or Techniques Developed.

Despite their extensive training, each of the DTS teachers indicated that they continued to develop their skills as a result of their positions in the DTS. Both teachers said that their collaborative consultation and problem solving skills were enhanced and their ability to meet individual teachers at their comfort and experience level improved. Part of this was due to the fact that these teachers worked as a team within a team. While each of the teachers was working with different classroom teachers at any one time, they continued to share ideas and experiences with each other. In particularly challenging

situations, both teachers would attend problem solving meetings.

During the third year of operation, when the DTS staff was temporarily reduced by one, the remaining DTS teacher said that she missed this particular collaborative aspect. It should be noted that the DTS teacher who held a temporary administrative position this year also stated that she missed working closely with a partner. These comments would suggest that teachers in consultative roles need the opportunity to work with colleagues in similar positions.

The DTS personnel also continued to learn new strategies from the classroom teachers. This is a natural consequence of teachers working closely together in the same classroom and further supports the literature that classroom teachers also have expertise that can be shared with support personnel (Friend and Bauwens, 1988; Tindal et. al., 1991; Giangreco et. al., 1993).

Both of the teachers said that they have become even more comfortable in approaching each classroom teacher as an individual and accepting where each teacher is in relation to his/her comfort level in working with students with LD. One DTS teacher said, "I find out what's important to the teacher and work from there." The other said, "I don't take things personally anymore if things don't happen the way I expect them to. I see every little bit of growth as a seed planted."

Each of the DTS teachers said that this experience has enhanced their belief in the process of learning and growing. One teacher noted, "I'm more attuned to the process of problem solving verses `I have the answer'. I don't take a lot of stuff into a meeting because I don't want to appear as the expert." This comment is consistent with the literature that states that consultants should shed the expert image and that classroom teachers are more apt to work

collaboratively when they are seen as equal partners in the problem solving process (West and Idol, 1987; Friend and Bauwens, 1988; Robinson, 1991).

One teacher noted that they learned how important it was to get back to the classroom teacher and that the teachers appreciated reports/feedback that were short, to the point and practical from their point of view.

Advantages of Inclusion for Students with LD

The DTS personnel cited similar advantages outlined by the teachers in this study. These included: increased self esteem due to demonstrated success experienced in the classroom and not being singled out for pull-out instruction, learning to work with others and the positive role models of their peers which resulted in more socially acceptable behaviours and, exposure to a more enriched environment.

Advantages of Inclusion for Teachers

Both teachers felt that inclusion can develop a classroom teacher's awareness of individual differences. This understanding and the strategies learned to accommodate these differences would also benefit all learners in the classroom. The DTS personnel also felt that inclusion provided the classroom teacher with the opportunity to work with other professionals and thereby tap into expertise that could enhance their own professional growth.

Disadvantages of Inclusion for Students with LD

The teachers in the DTS felt that one disadvantage of inclusion for students with LD would be that they do not always get as much one-on-one instruction as they require which could lead to frustration for the students. This is particularly true for students who may find the language level in the classroom too difficult and need extra assistance to understand concepts taught in the classroom.

Both teachers felt that the students' frustration could then lead to behaviour difficulties which could result in negative attitudes towards these students from their peers. One of the DTS teachers said that she was also concerned that in some cases the students' emotional needs were not met and that some students needed intensive instruction to break the negative self-talk habits that these students have.

These comments reinforce the need for a continuum of services for students with LD and for teachers who are trained to understand the different learning needs of these students, who can model acceptance and tolerance of others, and who can provide a caring and nurturing environment.

<u>Disadvantages of Inclusion for Teachers.</u>

The DTS teachers cited disadvantages to teachers similar to the disadvantages stated by the teachers in this study. These included the extra meeting and planning time needed to implement individual education plans and the time needed to develop resources. This included the collection of alternate material, the adaptation of existing material and the development and implementation of appropriate teaching strategies.

They also noted however, that some teachers may feel inadequate or guilty about not being able to meet all of the students' needs. One DTS teacher noted that part of this may be due to the fact that some teachers are not used to measuring success in such small increments. Because students with LD do not master skills at the same rate as their typical peers, teachers may start to question their ability to teach.

These feelings of inadequacy may be one reason why some teachers don't ask for, or will not willingly accept, help in their classrooms. Traditionally, teachers have been autonomous in their classrooms and have been expected to

84

handle most difficulties on their own. To support teachers who work with students with LD, administrators should foster a collaborative atmosphere in their schools and qualified consultants and support teachers should be available to assist teachers in their understanding of students with LD.

Necessary Elements for Successful Inclusion of Students with LD.

The teachers in the DTS felt that in order for inclusion to be successful, the students needed flexible teachers who were willing to problem solve, look at alternatives, adjust expectations and be willing to adjust programs and teaching methods when necessary. Teachers also had to have a recognition of different learning styles and a repertoire of strategies to meet different learning needs. They also had to be willing to be a part of a team in order to develop these skills.

The DTS teachers also stated that the students had to be a part of the problem solving process. This could be accomplished by including the students in their own goal setting and gradually increasing the goals as each new standard is met. The DTS teachers also pointed out that the parents also had to part of the process and that they had to understand their child's disability and work closely with the school to achieve mutually agreed upon goals.

Additionally, the DTS teachers stated that administrative, teaching assistant, and school support teacher support had to be available for the classroom teacher if inclusion was to be successful for students with LD. They also emphasized that time for consultation had to be provided for classroom teachers to meet with all of the personnel involved in planning for these students. In addition, teachers also needed preparation time to plan appropriate strategies, prepare modifications and develop the IEP's.

DTS Personnel's Additional Comments and Observations.

Despite the possible disadvantages of inclusion outlined by the DTS

teachers, they both stated emphatically, that having worked in both pull-out and inclusive models, they found the inclusive model to be far superior. They found that this was the most successful way that they had worked with these students and that they had also grown personally as result of the collaborative nature with which they worked with classroom teachers.

It appears from the above comments that the DTS personnel hold similar views to those of the classroom teachers and that they also have benefitted professionally from the collaborative structure of this service delivery model. It should also be noted that as of September, 1994, the DTS will be staffed to its original capacity with the return of one of the teachers who was on a temporary administrative assignment. There is also the possibility that there will be an additional position in the DTS to work with students with more challenging needs.

Chapter Five

Conclusion

This program evaluation study was designed to evaluate the service provided by the DTS from the classroom teachers' perspective. In addition to answering the three main questions outlined in chapter one, the study was designed to provide descriptive data in order to assist the DTS in refining and improving its service to teachers and students. The School District also endorsed this study in order to provide data to the Board with regards to support programs for students with learning disabilities.

As previously mentioned in chapter three, chapter four was organized around the individual questions posed to the respondents. In many cases, the responses to each question provided data to more than one of the three main research questions. In this chapter, the evaluator summarizes the important findings according to the three main research questions. Additional findings, limitations of the study, and suggestions for further research are also discussed.

Has the Classroom teacher's Involvement with the DTS Improved their Comfort Level in Working with Students with Learning Disabilities?

From the evaluator's perspective, it is important to note that while some teachers indicated that their comfort level had improved, there were some teachers who indicated that they were more confused than ever now that they knew what these students required as far as program modifications were concerned. This heightened awareness has caused frustration for some classroom teachers who feel that while they may now have the knowledge to provide adequate programming and access appropriate resources, they do not always have the time to do so.

This study also showed that another source of frustration was the fact that

teachers felt they were spending too much time with the students with learning disabilities to the detriment of some of the other students in the class who also required assistance. These findings would suggest that while teachers may feel more comfortable in working with students with learning disabilities, they must be provided with adequate resources and planning time to meet the needs of all the students in their classrooms. The type of support necessary has been outlined in chapter four.

To What Degree Were Classroom Teachers Involved in the Collaborative Problem Solving Process?

The majority of the respondents felt that they had been highly involved in the problem solving process and that their needs were considered in program implementation. The evaluator believes that this is due in large part to the skills of the consultants who did their best to shed their expert image and included the classroom teacher as an equal partner in the collaborative process. In doing so, the consultants also continued to develop new skills themselves which can then be shared with others.

One important finding is that planning sessions with the DTS centered around individual students' strengths and weaknesses, outlined goals and objectives for these students, and developed teacher skills and strategies for classroom implementation. These practical planning sessions were appreciated by classroom teachers and some teachers noted that as they became more comfortable in working with the DTS, the planning sessions became informal and built on student successes or failures as they occurred in the classroom setting.

Another important finding of this study, is that the classroom teachers appreciated the school support teachers' involvement in the collaborative

process which provided them with on-going support when the DTS was not available. School support teacher involvement can also ensure on-going support for the students as they move from grade to grade.

Were Classroom Teachers Satisfied With the Intervention Support Provided by the DTS?

The majority of the respondents were satisfied with the intervention support provided by the DTS. One obvious reason for this is that the classroom teachers' expertise was considered in the problem solving process. The majority of the classroom teachers also indicated that they were pleased with the growth of the students referred to the DTS. While this could be due in part to the increased skill level of the students involved, it may also be due to individual teacher's changed perceptions in working with this population.

Another important finding of this study is that the majority of the respondents felt that they had acquired new skills and teaching techniques which they continue to use with all of their students. One could surmise from this statement that the collaborative consultative model of service delivery is one way to promote professional development amongst staff members. One reason for this is that teachers have input into what is happening in their classrooms and strategies and teaching methods are modelled and implemented in realistic settings. Once teachers see how these strategies can be incorporated into what they are already doing in the classroom, they are more apt to use them on a regular basis. Many of the respondents stated that collaborative consultation has permanently affected the way they teach.

Additional Findings

While many benefits of the service were discussed in chapter four, the data also suggests that there still remains a need for a continuum of service for

students with learning disabilities. Educators should be cautioned that when embracing new models of service delivery, they do not ignore the individual needs of some students. Even though the inclusive model of service delivery discussed in this study was seen as valuable for students with LD, many of the respondents pointed out that there were times when some students needed more intensive, pull-out instruction. The consultants in this study concurred.

A full inclusion philosophy should not preclude this type of instruction. Rather, through collaborative consultation, temporary pull-out instruction should be considered as an option for students and provided as an element in the continuum of services made available to these students. The school support structure should be such that while students belong to a regular classroom, they may receive individualized instruction in resource rooms with assistance from the school support teacher and/or teaching assistants. The classroom teacher must maintain joint responsibility for these students to ensure a smooth transition of skills to the regular classroom.

This type of structure requires on-going planning and a coordination of school based and District resources. One finding from this study is that classroom teachers felt that additional resources were necessary in order for this type of service delivery model to be effective. Contrary to the opinion of some people in education and the public sector, inclusion models are not more cost efficient than segregated programs since resources and supports must be spread out from school to school and classroom to classroom. While the majority of the respondents in this study were satisfied with the type of support provided by the DTS, they also stated that more DTS personnel and longer and more easy access to these types of program supports were essential.

This study shows that from the classroom teachers' perspective, the

Diagnostic Teaching Service, based on collaborative consultation, is a valuable support system for classroom teachers and their students with learning disabilities. The structure of the DTS and the skills of the consultants appear to have provided the means to overcome the personal barriers to consultation outlined by Robinson, (1991). What is also evident however, is that the structural and external barriers that control scheduling for planning and meeting time and funding for necessary resources are still present. These barriers must also be addressed if classroom teachers are to provide appropriate programs for students with learning disabilities in regular classroom settings.

Limitations of the Study

One limitation of this study is that only half of the teachers who accessed the DTS in this time period returned completed questionnaires. While there were some obvious reasons for this limited response as outined in chapter three, a number of teachers declined to respond without explanation. One possible explanation for this could be that these teachers were so overworked as to not have time to complete the questionnaire. Another explanation could be that these teachers chose not to complete the questionnaire because they were not satisfied with the DTS. If this were true, their responses could have significantly affected the data. Without explanations as to why their questionnaires were not returned, one can only speculate on the possible reasons and proceed with the data that were available.

A further limitation could be the limited sample size, however every teacher who had accessed the DTS was issued a questionnaire. While this study focused on classroom teacher perceptions, cross validation of this program evaluation could be determined by surveying additional stakeholders such as the students, administrators, parents, and school support teachers involved with the

DTS. It should be noted that the DTS personnel have conducted their own surveys of these stakeholders. The results of these surveys are on file with the DTS and support many of the findings outlined in this study.

Another possible limitation of this study is that the data were based on teacher perceptions as opposed to an empirical base. While this may be seen as a limitation, it was important to look at teacher perceptions of the effectiveness of collaborative consultation models of service delivery since they are ultimately responsible for the implementation of interventions in their classrooms. The District personnel responsible for the DTS and the DTS personnel themselves were also interested in the descriptive data provided by these teacher perceptions in order to evaluate and refine their service to classroom teachers.

A further limitation is that the data did not show that classroom teachers were often working with a very diverse population over and above their students with learning disabilities. Under this District's Full Inclusion Philosophy, all students, regardless of categorical label, attend regular classes. This means that in some cases teachers were also working with students with multiple handicaps in addition to students with severe behaviour difficulties. This is one possible explanation for the frustration that teachers felt about the lack of resources available and the fact that they were not spending enough time with the students in their class who would typically require learning assistance.

A final limitation of this study is that the respondents who accessed the DTS did so voluntarily. While they may have been encouraged to do so by their school support teacher or District support personnel, the length and type of support utilized was often very much up to the individual classroom teacher. One could surmise from this that the teachers who accessed the DTS and completed the questionnaires had the style, skills, attitudes and beliefs that

support collaborative consultation. This might explain the fact that of the teachers who completed the questionnaire, there was no correlation between teacher experience and training and their satisfaction with the DTS. The data do not provide information about the teachers who declined to complete the questionnaire or about teachers in the District who work with students with LD but did not access the DTS.

Suggestions for Further Research

Further research is needed to examine more closely the knowledge, skills, attitudes and personality characteristics of successful versus unsuccessful consultants and consultees. Also needed are studies that reflect the complex, interactive nature of the collaborative consultation process. This could be accomplished through in depth analyses of consultant/consultee interactions in various stages of the consultation process.

Investigations into the impact of collaborative consultation on teacher behaviours associated with effective teaching strategies and increased student performance are also needed. While this study looked at teacher perceptions of student growth, empirical studies that measure changes in student achievement are necessary. Longitudnal studies that measure individual student growth over time are also needed to determine whether or not inclusive models of service delivery are effective for students with learning disabilities.

Further research is also needed to explore the effectiveness of collaborative consultation as a service delivery model for students with more challenging needs since, in inclusive schools, teachers work with students with a wide range of abilities in their classrooms. In addition to student outcomes, these studies should also measure cost effectiveness and the time element involved in programming for these students.

Additional studies on inclusion could focus on teachers who have students with learning disabilities in their classes who have not accessed available support services such as the DTS. Also to be investigated is the impact of inclusion on typical students in the classroom.

Finally, additional studies are needed to study the impact that structural and external barriers have on collaborative consultation models of service delivery for exceptional learners. As this study indicated, there were many organization and systems variables that appeared to affect teacher perceptions of the effectiveness of inclusive models of service delivery based on collaborative consultation.

Individual school districts are advised to undertake such studies themselves in order to evaluate the programs they have implemented. This is especially important since personal, structural and external barriers to effective consultation are often specific to district and individual school sites. Evaluations of these programs should also be on-going as these organization and systems variables change over time and are likely to have an impact on program implementation, support for regular classroom teachers, and service to students with special learning needs.

References

Ainscow, Mel (1991). Effective schools for all: an alternative approach to special needs in education. <u>Cambridge Journal of Education</u>, 21(34), p. 293-307.

Babineau, R. E. (1991). Restructuring education - restructuring facilities. <u>CEFPI's Educational Facility Planner</u>, 29(1), p. 5-10.

Bartel, N.R. and Thurman, S.K. (1992). Medical treatment and educational problems in children. <u>Phi Delta Kappan</u>, 74(1), p. 57-61.

Burgess, D.M. and Streissguth, A.P. (1992). Fetal alcohol syndrome and fetal alcohol effects: principles for educators. <u>Phi Delta Kappan</u>, 74(1), p. 24-30.

Case, A.D. (1992) The special education rescue: a case for systems thinking. <u>Educational Leadership</u>. 50(2), p. 32-34.

Chalfant, J.C. (1987). Providing services to all students with learning problems: implications for policy and programs in Vaughn, S, and Boss, C. (Eds.) <u>Research in Learning Disabilities</u>: Issues and Future Directions. Boston, Massachusetts: College-Hill Press.

Cooper, D. H. and Speece, D. L. (1990). Maintaining at-risk children in regular education settings: initial effects of individual differences and classroom environments. <u>Exceptional Children</u>, 57(23), p. 117-127.

Dickinson, D. J. and Adcox, S. (1984). Program evaluation of a school consultation program. <u>Psychology in the Schools</u>, 21, July, p. 336-342.

Edgar, E. (1987). Secondary programs in special education: are many of them justifiable? <u>Exceptional Children</u>, 53(6), p. 555-561.

Forest, M. and Pearpoint, J.C. (1992). Putting all kids on the map. <u>Educational Leadership</u>. 50(2), p. 26-31.

Friend, M. and Bauwens, J. (1988). Managing resistance: an essential consulting skill for learning disabilities teachers. <u>Journal of Learning Disabilities</u>, 21 (9), p. 556-561.

Fuchs, D., Fuchs, L., Bahr, M., Fernstrom, P. and Sticker, P. (1990). Prereferral intervention: a prescriptive approach. <u>Exceptional Children</u>, 56(6) p. 493-513.
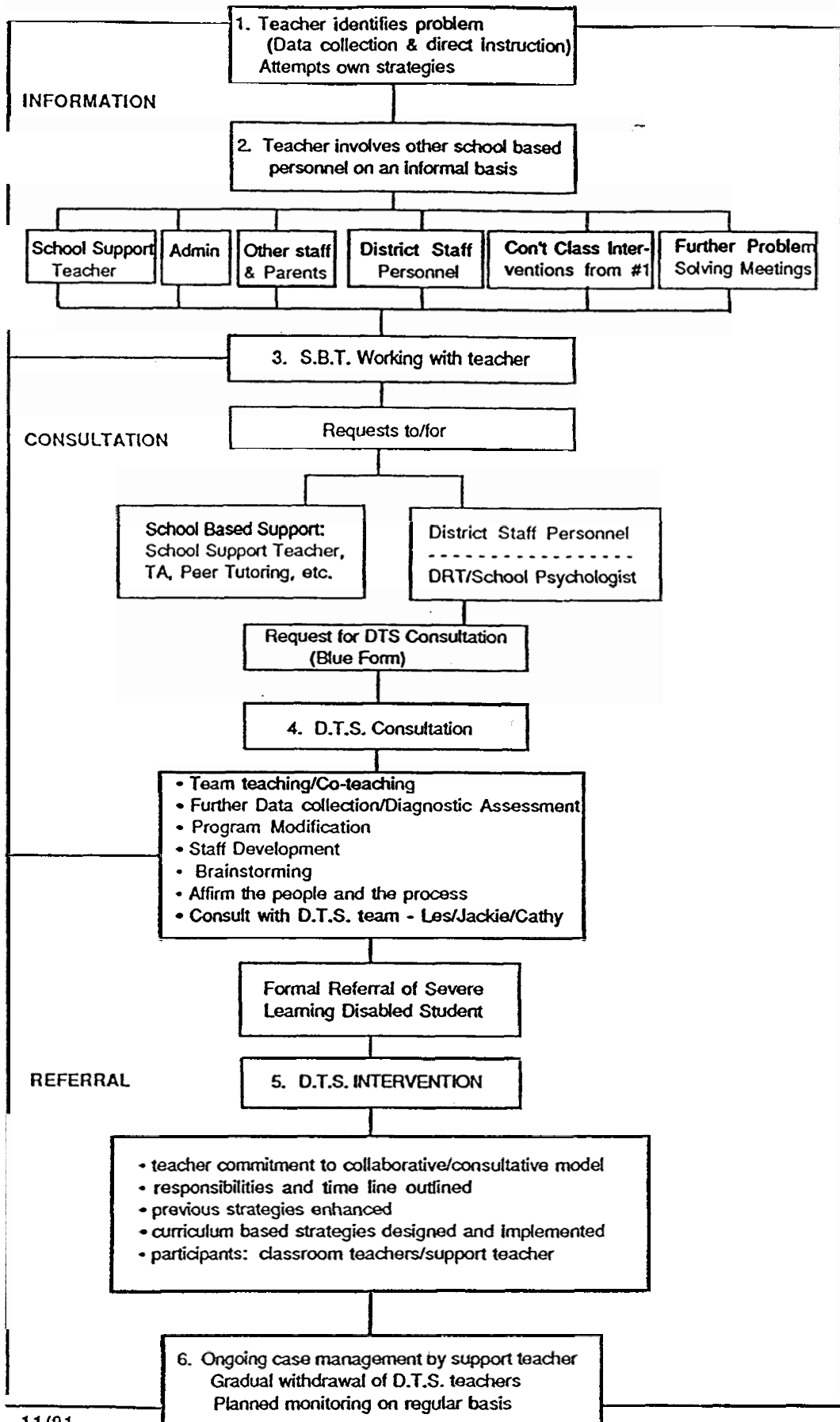
Fuchs, D., Fuchs, L.S., and Baker, M. W. (1990). Mainstream assistance teams: a scientific basis for the art of consultation. <u>Exceptional Children,</u> 57(2), p. 128-139.

Full Service Neighbourhood School Document (February 1991). Maple Ridge, Pitt Meadows School District.

Gamoran, A. (1992). Synthesis of research: is ability grouping equitable? <u>Educational Leadership,</u> 50(2), p. 11-17.

Gelzheiser, L. M. and Meyers, J. (1990). Special and remedial education in the classroom: theme and variations. <u>Reading, Writing and Learning Disabilities,</u> 6, p. 419-436.

Gelzheiser, L. M. and Meyers, J. (in press) Classroom teachers' views of pull in programs.

Gersten, R., Darch, C., Davis, G., and George, N. (1991). Apprenticeship and training of consulting teachers: a naturalistic study. <u>Exceptional Children,</u> 57(3), p. 226-236.

Giangreco, M. F., Dennis, R., Cloninger, C., Edelman, S. and Schattman, R. (1993). "I've counted you": transformational experiences of teachers educating students with disabilities. <u>Exceptional Children,</u> 59(4), p. 359-372.

Givens-Ogle, L., Christ, B.A., and Idol, L. (1991). Collaborative consultation: the San Juan unified school district project. <u>Journal of Educational and Psychological Consultation,</u> 2(3), p. 267-284.

Glathorn, A. (1986). What about youth at risk? in H. J. Walberg and J. Keefe (Eds.). <u>Rethinking Reform: The Principal's Dilemma: A Special Report of NASSP Curriculum Council,</u> Reston, Virginia: NASSP.

Graden, J. L., Casey, A. and Bonstrom, O. (1985b). Implementing a prereferral intervention system: part II. the data. <u>Exceptional Children,</u> 51(6) , p. 487-496.

Graden, J. L., Casey, A. and Christenson, S. L. (1985a). Implementing a prereferral intervention system: part I. the model. <u>Exceptional Children</u> 51(5), p. 377-384.

Griffith, D. R. (1992). Prenatal exposure to cocaine and other drugs: developmental and educational prognoses. <u>Phi Delta Kappan,</u> 74(1), p. 30-34.

Halgren, D.W. and Clarizio, H.F. (1993). Categorical and programming changes in special education services. Exceptional Children, 59(6), p. 547-555.

Idol, L. and West, J. F. (1987). Consultation in special education (part II): training and practice. Journal of Learning Disabilities, 20(8), p. 474-497.

Jenkins, J., Pious C., Jewell, M. (1990). Special education and the regular education initiative: basic assumptions. Exceptional Children, 56(6), p.479-491.

Jones, B. F. (1986) Quality and equality through cognitive instruction. Educational Leadership. April, p.5-11.

Kauffman, J. (1993). How might we achieve the radical reform of special education? Exceptional Children, 60(1), p. 6-16.

Kauffman, J. M. and Trent, S. C. (1991). Issues in service delivery for students with learning disabilities in Wong, B.Y.L. (Ed.). Learning About Learning Disabilities. Academic Press, Inc. Harcourt Brace Jovanovich, San Diego, California, p. 466-478.

Keogh, B. K. (1988). Improving services for problem learners: rethinking and restructuring. Journal of Learning Disabilities. 21(1), p. 19-22.

Keogh, B. K. (1990). Narrowing the gap between policy and practice. Exceptional Children, 57(2), p. 186-193.

Mather, N. and Roberts, R. (1994) Learning Disabilities: a field in danger of extension? Learning Disabilities Research and Practice, 9(1), p. 49-58.

McLaughlin, M.J. and Hopfengardner Warren, S. (1992). Issues and Options in Restructuring Schools and Special Education Programs. University of Maryland at College Park and Westat, INC.

McLeskey, J., and Pacchiano, D. (1994). Mainstreaming students with learning disabilities: are we making progress? Exceptional Children, 60(6), p. 508-517.

McLeskey, J., Skiba, R., and Wilcox, B. (1990). Reform and special education: a mainstream perspective. The Journal of Special Education, 24(3), p. 317-325.

Meyers, J., Gelzheiser, L. M. and Yelich, G. (1991). Do pull-in programs foster teacher collaboration? Remedial and Special Education, 12(2), p. 7-15.

Neufeld, R.C. and Stevens, A. (1992). Book 1: A Summary of Research on School Dropouts and Implications for Special Education. Kingston, Ontario: C.E.C.

Osborne, A. G. and DiMattia, P. (1994). The IDEA's least restrictive environment mandate: legal implications. Exceptional Children 6l(1), p. 6-14.

Phillips, V. and McCullough, L. (1990). Consultation-based programming: instituting the collaborative ethic in schools. Exceptional Children, 56(4), p. 291-305.

Pianta, R. C. (1990). Widening the debate on educational reform: prevention as a viable alternative. Exceptional Children, 56(4), p. 306-313.

Piersel, W. C. and Gutkin, T. B. (1983). Resistance to school-based consultation: a behavioural analysis of the problem. Psychology in the Schools, 20, p. 311-320.

Pugach, C. and Johnson, L. J. (1989). Prereferral interventions: progress, problems and challenges. Exceptional Children, 56(34), p. 217-227.

Pugach, C. and Johnson, L. J. (1989). The challenge of implementing collaboration between general and special education. Exceptional Children, 56(3), p. 232-235.

Reynolds, C. R. , Wang, M. C., and Walbert, H. J. (1987). The necessary restructuring of special and regular education. Exceptional Children, 53(56) p. 391-398.

Robinson, S. M. (1991). Collaborative consultation in Wong, B. Y. L. (Ed.). Learning About Learning Disabilities. Academic Press, Inc. San Diego, California.

Sailor, W. (1991). Special education in the restructured school. Remedial and Special Education, 12(6), p. 8-12.

Schulte, A. C., Osborne, S. S. and Kauffman, J. M. (1993). Teacher responses to two types of consultative special education services. Journal of Educational and Psychological Consultation, 4(1), p. 1-27.

Schulte, A. C., Osborne, S. S. and McKinney, J. D. (1990). Academic outcomes for students with learning disabilities in consultation and resource room programs. Exceptional Children, 57(2), p. 162-175.

Shanker, A. (1990). The end of the traditional model of schooling and a proposal for using incentives to restructure our schools. Phi Delta Kappan. January, p. 345-357.

Skrtic, T. (1991) Behind Special Education: A Critical Analysis of Professional Culture and School Organization. U.S.A.: Lone Publishing Company.

Stake, R. E. (1973). The countenance of educational evaluation in Worthen, B. R. and Sanders, J. R. (Eds.). Educational Evaluation: Theory and Practice.Worthington, Ohio: Charles A. Jones Publishing Company.

Stevens, L.J. and Price, M. (1992). Meeting the challenge of educating children at risk. Phi Delta Kappan, 74(1), p. 18-23.

Tindal, G., Shinn, M. R. and Rodden-Nord, K. (1990). Contextually based school consultation: influential variables. Exceptional Children, 56(4), p. 324-335.

Wang, M.C., Walberg, H., and Reynolds, M.C. (1992). A scenario for better - not separate - special education. Educational Leadership. 50(2), p. 35-39.

West, J. F. and Idol, L. (1987). School consultation (part 1): an interdisciplinary perspective on theory, models and research. Journal of Learning Disabilities, 20(7), p. 388-408.

Will, M. C. (1986). Educating children with learning problems: a shared responsibility. Exceptional Children, 52(5), p. 411-415.

York, J. and Vandercook, T. (1990). Strategies for achieving an integrated education for middle school students with severe disabilities. Remedial and Special Education, 11(5), p. 534-544.

Zigmond, N. and Baker, J. K. (1990). Mainstream experiences for learning disabled students (project MELD): a preliminary report. Exceptional Children, 57(2), p. 176-185.

DIAGNOSTIC TEACHING SERVICE - FLOW CHART

INFORMATION

1. Teacher identifies problem
   (Data collection & direct instruction)
   Attempts own strategies

2. Teacher involves other school based
   personnel on an informal basis

| School Support Teacher | Admin | Other staff & Parents | District Staff Personnel | Con't Class Inter-ventions from #1 | Further Problem Solving Meetings |

3. S.B.T. Working with teacher

CONSULTATION

Requests to/for

School Based Support:
School Support Teacher,
TA, Peer Tutoring, etc.

District Staff Personnel
- - - - - - - - - - - - - - - -
DRT/School Psychologist

Request for DTS Consultation
(Blue Form)

4. D.T.S. Consultation

- Team teaching/Co-teaching
- Further Data collection/Diagnostic Assessment
- Program Modification
- Staff Development
- Brainstorming
- Affirm the people and the process
- Consult with D.T.S. team - Les/Jackie/Cathy

Formal Referral of Severe
Learning Disabled Student

REFERRAL

5. D.T.S. INTERVENTION

- teacher commitment to collaborative/consultative model
- responsibilities and time line outlined
- previous strategies enhanced
- curriculum based strategies designed and implemented
- participants: classroom teachers/support teacher

6. Ongoing case management by support teacher
   Gradual withdrawal of D.T.S. teachers
   Planned monitoring on regular basis

11/91

Diagnostic Teaching Service
Questionnaire
(Confidential)

Please provide us with some information about yourself:

Name: _____   Date of Birth:_____(optional)

Gender:_____   Teaching Experience: _____ years

School: _____   Today's Date: _____

If you have had any formal or informal training in working with students with special needs could you please provide some details: _____

_____

_____

_____

If you have had any previous experiences in working with students with special needs could you please tell us about them.

_____

_____

_____

How did you feel about working with students with learning disabilities before your involvement with the DTS?

_____

_____

_____

Tell us a little about your contact with the DTS:

With how many referrals to the DTS have you been personally involved? _____

What length of time were you involved with the DTS?
      Less than one month _____   One to six months _____
      Six to twelve months _____   One to two Years _____
      Other (please specify) _____

How often did you meet ?
      Once a week _____   Once a month _____
      Other (please specify) _____

Were the meetings?
    Formal _____   Informal _____

Who initiated these meetings?
    Classroom teacher _____   Support Teacher _____
    Counsellor _____   Administrator _____
    School Psychologist_____   District Resource Teacher ___
    DTS Teacher_____   Other _____

  Who participated in these meetings?
    Classroom teacher _____   Support Teacher _____
    Counsellor _____   Administrator _____
    School Psychologist _____   District Resource Teacher ___
    DTS Teacher_____   Parents _____
    Other _____

What happened during these meetings?
_____
_____
_____

Did the meetings/planning sessions change from your first involvement with the
DTS?   Yes _____ No _____.

    If they changed, could you please describe the change?
    _____
    _____
    _____

    If they did not change, could you please suggest any changes you may
    have wanted and the reasons why you would have wanted these changes?
    _____
    _____
    _____

Tell us about the support you received:

How were you involved in planning appropriate interventions for your student?
_____
_____
_____

Was the school support teacher involved in the intervention support for the student(s) in your classroom?   Yes _____ No_____

If your answer was yes, please describe, the ways in which the school support teacher was involved in the intervention support for the student(s) in your classroom?

_____

_____

_____

Can you think of any advantages or disadvantages to the involvement of the school support teacher in interventions for the learning disabled student?

_____

_____

_____

Were there any new skills or techniques that you acquired as a result of your involvement with the DTS?   Yes _____ No _____

> If you did acquire new skills or techniques, could you tell us what they were and how you feel you acquired them?
>
> _____
>
> _____
>
> _____

Has your teaching style changed in any way as a result of your involvement with the DTS? Explain.

_____

_____

_____

What changes occurred in your classroom as result of your involvement with the DTS?

_____

_____

_____

What changes occurred in the referred student(s) as result of your involvement with the DTS?

_____

_____

_____

Have your views in working with students with learning disabilities changed in any way as a result of your involvement with the DTS? Explain.

_____

_____

_____

Tell us how satisfied you were with the service provided:

Please rate your overall satisfaction with your involvement with the DTS.

Above Average _____ Average _____ Below Average _____ Poor _____

What were the criteria you used to rate the DTS?

_____

_____

_____

What are the benefits of the service?

_____

_____

_____

What improvements are needed to enhance the DTS?

_____

_____

_____

How might these improvements be implemented?

_____

_____

_____

Could you share your current views regarding service for students with learning disabilities:

What **advantages** are there to inclusive models of service delivery for students with learning disabilities?

_____

_____

_____

What **advantages** are there to inclusive models of service delivery for teachers of students with learning disabilities?

_____

_____

_____

What **disadvantages** are there to inclusive models of service delivery for **students** with learning disabilities?

_____

_____

_____

What **disadvantages** are there to inclusive models of service delivery for **teachers** of students with learning disabilities?

_____

_____

_____

What conditions need to be present for students with learning disabilities to be successful in regular classroom placements?

_____

_____

_____

_____

Telephone Interview Questions

1. Were there any new skills or techniques that you acquired as a result of your involvement with the DTS?

2. Please elaborate on your above answer. a)On what basis did you make the above response? b)What new skills or techniques did you acquire? How are you doing things differently? c)If you feel that nothing has changed as a result of your involvement with the DTS, please indicate why.

3. From your experience, what are the advantages of inclusion: a)for students with learning disabilities? b)for teachers?

4. What are the disadvantages of inclusion: a)for students with learning disabilities? b)for teachers?

5. What conditions need to be present for students with learning disabilities to be successful in regular classroom placements?

6. Please feel free to make any additional comments/observations.