

THE UNIVERSITY OF MANITOBA

AN INVESTIGATION OF STRESS LEVELS  
OF RESOURCE TEACHER TRAINEES  
IN TRINIDAD AND TOBAGO

by

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TEACHER TRAINEES IN TRINIDAD AND TOBAGO

BY

VALERIE McCORKELL

A thesis submitted to the Faculty of Graduate Studies of  
the University of Manitoba in partial fulfillment of the requirements  
of the degree of

MASTER OF EDUCATION

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## ABSTRACT

This study examines the stress levels, the nature of the stressors, and the perceived degree of difficulty encountered by 26 Trinidad and Tobago educators in implementing consultative-collaborative resource behaviours. The 26 participants, part of the University of Manitoba - Trinidad and Tobago Special Education Project, 1987-1991, were trained in resource teacher behaviours and at the end of the workshops were expected to start resource programs in their schools.

It was hypothesized that as trainees implemented their programs that the overall stress levels of the entire group would increase, and that there would be a difference in the stress levels of elementary and secondary participants. It was also anticipated that the nature of the overall group's stressors would change throughout the study. An increase in the group's perceived degree of difficulty in implementing resource behaviours was also hypothesized, and it was anticipated that secondary trainees would experience greater perceived degrees of difficulty in implementing resource behaviours than would elementary trainees.

The study showed no significant differences in stress levels in the overall group of trainees as they began to implement their programs. Neither did it show any significant differences in the degree of difficulty perceived by the overall group as they implemented resource

teacher behaviours. The secondary trainees, however, showed both higher stress levels and higher perceived degrees of difficulty in implementing resource teacher behaviours than did the elementary trainees.

Participants in the study found parent-teacher relations, time management and intrapersonal conflicts to be areas of difficulty. They also experienced difficulty in implementing both diagnostic and consultative-collaborative behaviours. Finally, the amount of stress they evidenced did not seem to be a direct result of stressors in their personal lives, but a result of job-related occurrences.

A number of implications for further study emerge from this thesis. First of all, any further study should increase the sample size, particularly at the secondary level. Secondly, a simpler research design, using fewer groups is recommended. Thirdly, any further studies should be conducted by Trinidad and Tobago nationals to ensure on site monitoring. Fourthly, the training emphasis in the existing program should be re-evaluated. Desired resource teacher behaviours should be specified and required, with more structure and administrative supports for resource teachers built into the program.

## CHAPTER ONE

### Introduction

This chapter presents the objectives of the study, the impact of Public Law 94-142 (1975) on special education delivery services, the statement of the problem, the research questions, the null hypotheses, limitations of the study, educational significance, definition of terms, and the organizational outline of the thesis.

#### The objectives of the study

Teacher stress, focussing primarily on the stressors affecting classroom teachers, has been the topic of considerable research since 1980 ( e.g., Goodall and Brown, 1980; Cherkes and Fimian, 1982; Beasley, 1983; McIntyre, 1983; Leach, 1984; Coldcott, 1985; Wallace and Kass, 1986). While some researchers have chosen to compare the stress levels of regular and special educators, they have included in their samples only special educators working within self contained classrooms (Johnson, Gold and Vickers, 1982; Holland, 1982; Wheeler, 1982; Fimian and Santoro, 1981; Jones, 1987).

This study examines the stress levels, the nature of the stressors, and the perceived degree of difficulty encountered by 26 Trinidad and Tobago educators, both elementary and secondary, in implementing consultative-collaborative resource teacher behaviours as taught in the

University of Manitoba - Trinidad and Tobago Special Education Project Resource Teacher Program in 1989.

Impact of Public Law 94-142

With the advent of the mainstreaming thrust resulting from Public Law 94-142 (1975) in the United States, and similar legislation in Canada, the role of many classroom teachers and special educators has changed considerably (Bensky, Shaw, Gouse, Bates, Dixon and Beane, 1980; Poirier, Goguen, and Leslie, 1988). Regular classroom teachers are now intimately involved in mainstreaming special needs students, a process made possible in part by a redefinition of the role of the special educator. No longer in self contained classrooms, many special educators are now functioning as resource teachers working within a consultative collaborative framework with regular educators to integrate previously segregated students (Freeze, Bravi and Rampaul, 1989). A separate category of special educator, the resource teacher, trained specifically for this role, has also emerged (Harris and Schutz, 1986).

Similar changes in methods of delivery for special needs students are taking place in Trinidad and Tobago (Rampaul, McCluskey, McCorkell and Oxenham, 1987). The Ministry of Education, attempting to meet the needs of both newly mainstreamed children and those children experiencing learning difficulties, is also moving away from the traditional special education teacher model. In the belief

that the consultative-collaborative resource teacher concept presents one way of improving the quality of educational programming for special needs children, they have been engaged in the process of training selected elementary and secondary classroom teachers to become resource teachers working within a consultative-collaborative framework. This in-service professional development project emerged from the University of Manitoba - Trinidad and Tobago Special Education Project (1987-1991).

#### Statement of the problem

According to a 1984 Organization of American States survey conducted in Trinidad and Tobago, 24% of the children (or 40,771) were found to be low achieving and experiencing sufficiently significant learning difficulties to warrant special education services. A needs assessment in language arts and mathematics, conducted at the junior secondary level by the Trinidad and Tobago Ministry of Education (1985), also revealed overwhelming weaknesses in students' academic performance and teachers' professional competencies - the latter finding borne out by a recent survey (Freeze and Rampaul, 1989) revealing that only 19 per cent of elementary and secondary teachers are university educated. This same survey also revealed that both the administrators and teachers surveyed, agreed that "the most pronounced weaknesses result from a combination of students' negative attitudes and low motivation combined with teachers'



negative attitudes and inappropriate instructional strategies" (Freeze and Rampaul, 1989). These same administrators and teachers also agreed that Trinidad and Tobago teachers were inadequately trained to work with children who were low achieving, experiencing behavioural and/or emotional difficulties, had visual, hearing or speech impairments or who were mentally or physically handicapped.

The need for more appropriately qualified special education personnel also gained prominence when the national government of Trinidad and Tobago Fifteen Year Assessment of Education (1968-1983) recommended the pursuit of an educational policy aimed at creating educational opportunities, with particular emphasis on special education, for all children (Ministry of Education, Republic of Trinidad and Tobago, 1985). Emerging from these national efforts, came the rationalization for a Special Education project designed to meet the needs of students experiencing learning difficulties. The University of Manitoba - Trinidad and Tobago Special Education Project, 1987-1991, was subsequently designed and implemented in response to these educational needs.

University of Manitoba - Trinidad and Tobago Special  
Education Project (1987-1991)

The main objective of the University of Manitoba - Trinidad Tobago Special Education project (1987-1991) was to train educators, both in the mainstream and in special

schools, to make their intervention strategies more appropriate and relevant for children experiencing learning difficulties. In 1987, after the first workshop, it became apparent that providing regular classroom and special education teachers with the ability to diagnose and to prescribe instruction to accommodate special needs children in the mainstream was not enough; a teacher support system within each school was also necessary (Rampaul et. al, 1987). Out of this recognition, the Resource Teacher Training Program proposal emerged.

#### Resource Teacher Training Program

The Resource Teacher Training Program, as stated earlier, was designed to prepare regular elementary and secondary classroom and special education teachers to work as resource teachers within a consultative-collaborative model. Working within this model, trainees were expected to perform what are generally accepted as the three basic types of services for students experiencing learning difficulties: diagnosis, preparation and implementation of instructional programs, and consultation and collaboration with teachers, parents and educationally significant others (Weiderholt et. al., 1983). Ideally, trainees were to assume full-time resource positions within their schools; however, because of financial restraints, two groups emerged at both elementary and secondary levels. One group was confined to implementing the resource concept within their own classrooms and

extending the concept in a limited way only throughout the rest of the school, while the other group implemented on a school-wide basis.

Relationship between implementing resource teacher behaviours and stress levels

There is growing research evidence that special educators functioning in a consultative-collaborative framework are subject to stressors different from those of either regular classroom teachers or special educators in self contained classrooms (Bensky et. al, 1980; Weiskopf, 1980; Holland, 1982; Raschke, Dedrick and DeVries, 1988; Wallace, 1986). There is also growing evidence that there are differences in role definition and demands made on elementary and secondary resource teachers' time and expertise. The resultant stress levels of secondary resource teachers is an area left untouched by most of the research which focusses primarily on special education at the elementary level (Bachor and Crealock, 1986; Harris and Schutz, 1986; D'Alonzo and Wiseman, 1978; Weiderholt et. al., 1983).

Non work-related stress

One additional factor, the part played by non-work related stress, was also taken into account in this study. Since stress consists of our inner reaction to events and demands we can see that it has two primary sources: the events and demands of our lives and our inner reaction to

them (Mills, J., 1982). These general life stressors can result in irritability, illness, changes in sleeping patterns and difficulties with concentration (Buckalew, M.W., 1982). Such manifestations of general life stress could in turn, affect job performance. It therefore becomes important for the purposes of this study to attempt to make a distinction between work and non-work related stress.

In order to explore both work related and non-work related stress levels of elementary and secondary trainees, the nature of their stressors and their perceived degree of difficulty in implementing resource teacher behaviours, this study focussed on seven major research questions.

#### Research questions

1. Will the stress levels of the trainees increase as they attempt to implement a resource program in their schools?
2. Will there be a difference in stress levels between the two groups, those trainees who implement the resource teacher concept in their own classrooms only, and those trainees who implement the resource concept on a school-wide basis.
3. Will there be a relationship between stress levels and the perceived degree of difficulty encountered by both groups, in implementing resource teacher behaviours as presented in the Resource Teacher Training Program?

4. Will the nature of the trainees' stressors in both groups change specifically in relationship to their roles as resource teachers?
5. Will elementary and secondary trainees in both groups exhibit differences in stress levels?
6. Will the perceived degree of difficulty encountered by both groups in implementing resource teacher behaviours, as presented in the Resource Teacher Program, differ for elementary and secondary trainees?
7. Will there be a relationship between non-job related stress and job related stress as experienced by the 60 trainees?

#### Statement of the Hypotheses

To find the answers to the preceding research questions the study was designed to permit testing of the following hypotheses:

1. As the 60 Resource Teacher Program Trainees begin to practice resource teacher behaviours their overall stress levels will increase significantly as measured by pre and post-profiles using the Wilson Stress Profile.
2. There will be a difference in stress levels as measured by the Wilson Stress Profile between trainees implementing resource teacher behaviours

on a school-wide basis, and trainees implementing resource teacher behaviours in their own classrooms only.

3. There will be a positive relationship between stress levels and the perceived degree of difficulty encountered by all trainees as they attempt to implement resource behaviours. The perceived degree of difficulty in implementing resource teacher behaviours will increase from the first administration of the Resource Teacher Behaviour Scale in June, 1989, to the second administration of the same instrument in November, 1989.
4. The nature of the stressors experienced by all trainees will change specifically in relationship to their roles as resource teachers functioning in a consultative-collaborative resource model. Specifically, the trainees' stress levels under the categories of Employee-employer relations, Teacher-teacher relations, Time management, Parent-teacher relations and Intrapersonal conflict, as measured by the Wilson Stress Profile, will increase on the post-profiles after they assume their resource functions in their schools.
5. There will be a difference in stress levels between secondary and elementary trainees as measured by

the Wilson Stress Profile.

6. There will be a positive relationship between the perceived degree of difficulty in implementing resource teacher behaviours as measured by the Resource Teacher Behaviour Scale, and the level, elementary or secondary, at which these behaviours are being implemented.
7. There will be a positive relationship between non-job related stress as measured by the Holmes-Rahe Social Readjustment Scale and levels of job related stress as measured by the Wilson Stress Profile.

#### Limitations of the study

The limitations of the study, identified in Chapter Three are as follows: Threats to internal validity (a) history, (b) regression, (c) selection, and (d) mortality. Specificity of variables is discussed as a threat to external validity.

#### Educational significance

The eventual result of continual negative responses to stress may be burnout, and there is no doubt that teacher burnout ultimately affects children (Holland, 1982; Weiskopf, 1980). In the case of resource teacher burnout, not only are individual children affected but the entire consultative-collaborative framework of mainstreaming is at risk. Bensky et. al (1980), responding to such concerns in their study of stress and the implications of Public Law 94-

142, recommend changes in both pre and inservice programs, a reconsideration of resource and special education teacher caseload and preparation time, and an examination of school systems. Others, expressing similar concerns, also advocate proactive as opposed to retroactive approaches to stress reduction for special educators, recognizing that stress among special educators is not a temporary phenomenon that can be easily eliminated (Raschke et. al, 1988; Jones, 1987; Beasley, 1984; Holland, 1982; Goodall, 1980).

The intent of the Resource Teacher Training Program, on which this study is based, was to train teachers in consultative-collaborative resource functions to provide educationally supportive services to teachers and children. It was anticipated that trainees would encounter difficulties and possibly increased stress levels resulting from their changing roles. If in fact there are stressors specific to the role of resource teachers functioning in consultative-collaborative resource models, then it becomes imperative that resource teacher trainers identify these stressors and address the specific needs of resource teachers. This study is an attempt to do so.

The results of this particular study and further studies attempting to identify stressors specific to resource teachers functioning in consultative-collaborative situations will have major implications for resource



teacher training, on-going professional development and systems approaches to mainstreaming (Olsen and Matuskey, 1982; Shaw, 1981; Bensky et. al, 1980).

#### Definition of terms

For the purposes of this study the following terms are defined:

1. Resource program: any school operation in which a person (usually the resource teacher) has the responsibility of providing supportive educationally related services to students and/or their teachers (Weiderholt, Hammill and Brown, 1983, p. 3)
2. Consultative-collaborative resource model: a school operation providing direct support services to classroom teachers. Direct support to individual children is not provided over the long term in either the regular classroom, special class or resource room. Support is provided to the classroom teacher working with all children in the regular classroom to support classroom instruction (Freeze, Bravi and Rampaul, 1989).
3. Pull-out model of resource delivery: a school operation providing direct support services to children. Children are provided with teaching instruction by the resource teacher, usually within a resource room setting away from the regular

classroom. Instruction may, or may not support regular classroom instruction.

4. Common Entrance Examination: an examination written at age 11+ by all children in Trinidad and Tobago, the results of which determine post-primary placement. Those children scoring at the highest end of the scale are placed in what are called prestige schools, five year secondary institutions available only to children receiving the highest marks on the Common Entrance Examination. Children who do relatively well but who do not score high enough for entrance into prestige schools are placed in other five year secondary institutions. The remaining children are placed in three year junior secondary schools. Upon completion of their three year program they are then eligible to write the CXC examination defined below. Those children who are deemed unable to write the Common Entrance, or who score extremely low, enter a two year post-primary program leading to school leaving or entrance to technical-vocational schools.
5. Caribbean External Examination (CXC): The CXC is written by students who have completed a three year course of study and wish to complete their final two years of high school in a five year secondary school. Those students who do not score

high enough to gain entrance to five year schools may enter technical or vocational schools or enter the work force.

#### Organization of the study

This study is organized into five chapters. Chapter One discusses the objectives of the study, the impact of Public Law 94-142 (1975) on special education delivery services, the statement of the problem, the research questions, the null hypotheses, the limitations of the study, the educational significance of the study, definition of terms and an organizational outline of the remainder of the thesis.

Chapter Two contains a review of the literature related to the study of resource teacher stress. Existing studies are discussed under the following headings: stress levels common to both regular and special educators; sources of stress for resource or special education teachers working within a consultative-collaborative model; and differences between elementary and secondary resource teachers.

Chapter Three describes the subjects, the instruments used for data collection, the data collection procedures, the research design and the limitations of the study.

Chapter Four states and discusses the research findings. Each of the hypotheses is presented, followed by descriptive and non-parametric analyses.

Chapter Five gives an overview of the study, conclusions and proposes a number of recommendations for further research.

## CHAPTER TWO

### Literature Review

A review of the literature related to the study of resource teacher stress is presented in this chapter. Existing studies are discussed under the following headings: stress levels common to both regular and special educators; sources of stress for resource or special education teachers working within a consultative-collaborative model, i.e. assessment, caseload, individualized education programs, consultation and collaboration, mainstreaming difficulties, role definition; and differences between elementary and secondary resource teachers.

#### Stress levels common to both regular and special educators

A number of studies attempting to identify various job related factors causing stress for special educators, have concluded that there is little or no difference in stress factors for regular or special educators (Olsen and Matuskey, 1982; Falck and Kilcoyne, 1985; Wheeler, 1982; Beasley, 1983; Hudson and Meager, 1983) . Focussing on special educators working within self contained classrooms they have, however, included in their questionnaires very few stress factors which relate directly to special educators. One such study, focussing on self reported stress factors of teachers of Specific Learning Disabled (SLD) students, concludes that while there were job related

factors producing stress in teachers of children with specific learning disabilities, only one of the six sources of stress, excessive paperwork, identified by their teacher sample was not identified as stressful in earlier studies of regular classroom teachers (Olsen and Matusky, 1982).

When we examine the questionnaire used in this study, however, we see that it consists of thirty possible sources of stress classified into three separate categories: stress factors arising within the classroom, stress factors originating from the education system, and stress factors originating from the interaction of occupation and personal life (Olson and Matuskey, 1982).

The result of the study, however, that only one stress factor of teachers of children with specific learning disabilities is different from those of regular classroom teachers is not surprising when we look closely at the questionnaire items. The first nine items, immediate factors within the classroom, are not specific to special educators. They include such stressors as pupil-teacher ratio, groups of too wide an ability range and shortage of audiovisual equipment - all stressors which any classroom teacher from K-12 would experience.

The second group of stressors, factors within the structure of the educational system also includes "generic" classroom teacher stressors. They range from nonsupportive

administration, lack of planning time, poor chances of advancement, and compulsory staff meetings/committees. Only one factor within this section of the questionnaire is directly related to special education functions - the factor of excessive paperwork (IEPs, etc.).

The third group of stressors, factors relating to personal life, are again stressors that any educator faces - demands on after-school time, inadequate salary, in-service training-workshops requirements.

The results of the study show that five out of six of the most highly ranked stressors for teachers of children with specific learning disabilities match those identified by other studies researching stress factors of regular educators. Not surprisingly, the one factor identified by teachers of students with specific learning disabilities as the most stressful factor, excessive paperwork, was the only factor on the survey specific to their roles as special educators. The six highest stress factors, listed from highest to lowest percentage of consensus are as follows:

1. excessive paperwork (IEPs etc.)	78%
2. inadequate salary	66.2%
3. discipline of students	62.7%
4. inadequate planning time	55%
5. student attitude	55%
6. pupil-teacher ratio	53.9%

While this study does not address the specific job related stresses of teachers of children with specific learning disabilities, it concludes that the majority of the stress factors affecting regular educators and special

educators, in this case teachers of children with specific learning disabilities are the same.

Examining the variables common to educators who report a high degree of stress, and attempting to determine whether or not special education personnel actually evidence more stress and job related problems than other groups, Falck and Kilkoynne (1985) report similar findings. Their results support the hypotheses that special educators do not experience more job dissatisfaction than other comparable occupational groups, although they do report lower levels of subjective well being when compared to normative groups.

Again, the items included in this survey were not specific to the role of special educators. Five major areas were included: work on the job (which included only general areas such as challenge, sense of accomplishment and creativity), present pay, opportunities for promotion, supervision on the job and people on your present job. All of these categories and the items included under each could be generalized to regular teaching situations, indeed to a wide variety of occupations unrelated to education itself.

Weiskopf (1980) recognizes the limitations of such studies indicating that researchers need to determine and evaluate which variables are most likely to produce burnout symptoms among special educators. Taking six environmental sources of stress - work overload, lack of perceived success, amount of direct contact with children, staff/child



ratio, program structure and responsibility for others, she applies them directly to teachers of exceptional children.

For example, in her discussion of work overload she focusses on such factors as planning and implementing individualized programs, consulting with and counselling parents, and collaborating with regular educators. She concludes that due to the heavy and varied workload, job tension increases as job satisfaction decreases.

Summary of factors common to both regular and special educators

Stressors of both regular and special educators, as identified in existing studies - excessive paperwork, inadequate salary, discipline of students, inadequate planning time, student attitude, pupil-teacher ratio, non-supportive administration, lack of planning time, program, structure, staff-child ratio are primarily "generic" stressors applicable to all teachers. The results of these studies conclude that there are no significant differences in stress between the two groups. The one area in which regular and special educators seem to show differences in stress levels is in the area of excessive paperwork, an area which affects special educators more than regular educators.

Weiskopf's (1980) application of these "generic" stressors to teachers of exceptional children, however, reveals stressors specific to resource and special education functions. She identifies such factors as planning and

implementing individualized education programs, consulting and collaborating with parents and regular educators and heavy caseload.

Both the more "generic" sources of teacher stress and the stress factors applicable to resource teachers and special educators are taken into account in this study of the 26 Trinidad and Tobago resource trainees.

Stress levels of resource or special education teachers working within a consultative-collaborative model

Very little research examining stress and the role of the resource or special education teacher working within a consultative-collaborative framework has been conducted. However, when we look carefully at existing studies and areas that are pinpointed in reference textbooks for resource teachers as potential sources of conflict, a pattern of stressors emerges. They centre around the three basic functions of the resource teacher: diagnosis, preparation and implementation of instructional programs, and consultation and collaboration with teachers, parents and educationally significant others.

The following discussion of the three basic functions of resource teachers is presented under six major headings: assessment; caseload; individualized education programs (IEPs); consultation and collaboration; mainstreaming difficulties; and role definition.

### Assessment

Diagnosis and assessment, an extremely demanding task, rates high on the list of stressors for resource room teachers (Bensky et. al, 1980; Weiskopf, 1980; Holland, 1982; Raschke et. al, 1988). While no reasons for these findings are suggested, the complex nature of assessment, the importance of relating it to instructional planning, the fact that it is sometimes used for funding purposes, and to categorize or label students could all be stress producing factors for the resource teacher.

### Caseload

High case load is an additional source of stress for resource teachers (Weiskopf, 1980; Olsen and Matuskey, 1982; Bensky et. al, 1980). Weiskopf, (1980) indicates that the higher the ratio of resource students, the greater the pressure and emotional stress on resource teachers. Similar findings are related by Olson and Matuskey (1982), and Bensky et. al.(1980). High case load could also be tied into assessment stresses. In order to fully assess a student's strengths and weaknesses, it is necessary to use a variety of techniques. Global assessment, including background information, psychological testing and general ecological data are conducted prior to specific assessment. Specific assessment including curriculum analysis, classroom observation, work sample analysis and diagnostic testing follow ( Bachor and Crealock, 1986). If a resource teacher's

caseload is high, it becomes very difficult to conduct adequate global and specific assessment on each and every child within a reasonable timeline.

Timelines themselves are also cited as sources of stress to resource teachers (Raschke et. al, 1988). Meeting deadlines on assessment, instructional planning and implementation of programs is a major source of stress, particularly when combined with large caseloads.

#### Individualized Education Programs (IEPs)

Individualizing instruction and planning and implementing IEPs is another reported source of stress ( Raschke et. al. 1988; Holland, 1982; Weiskopf, 1980; Fimian, 1986; Bensky et. al, 1980; Olsen and Matuskey, 1982; Lawrenson and McKinnon, 1982 ). Once again, caseload contributes to stress in this area but in addition to caseload, another factor, co-worker support and cooperation in planning and implementing IEPs comes into play. Uncooperative regular education teachers and lack of co-worker support can greatly affect the stress levels of the resource teacher (Holland, 1980; Raschke et. al, 1988). Unless the classroom teacher is willing to cooperate in the planning and implementation of individualized programs, the whole assessment and planning process becomes pointless and therefore a source of great frustration to the resource teacher.

### Consultation and collaboration

As we move into the consultative-collaborative aspects of the resource teacher's job, we find additional sources of stress. Again there seems to be a lack of consideration of multiple consultant responsibilities in determining caseload and professional responsibilities (Harris and Schutz, 1986). Consulting with parents in either cooperative or adversarial situations, interpersonal problems with regular teachers, frequent team meetings and meeting the demands of the system all are significant sources of stress (Raschke et. al, 1988; Weiskopf, 1980; Holland, 1982; Bensky et. al, 1980).

### Mainstreaming difficulties

Despite its merits, mainstreaming has caused problems between resource teachers, "regular" teaching staff and administrators untrained in special education (Harris and Schutz, 1986). Resistance to mainstreaming on the part of administrators and/or teaching staff, ranging from apathy and passive resistance to verbal hostility and outright refusal to cooperate, are sometimes encountered (Weiderholt et. al, 1983). Research suggests that lack of administrative support is one of the strongest sources of stress reported by special educators (Cherniss, 1988; Fimian, Pierson and McHardy, 1986; Johnson, Gold and Vickers, 1982; Zabel and Zabel, 1981).

### Role definition

Two more significant predictors of stress, role clarity and the discrepancy between the resource teacher's perception of role and the expectations of others, emerged from a study of Public Law 94-142 and stress (Bensky et. al, 1980). Similar findings were noted in a study on actual and desired role performance of high school learning disability resource teachers (D'Alonzo and Wiseman, 1978). If the resource teacher's role and the program objectives are not clearly defined and presented to the staff as a whole, then the program will not be successful (Weiderholt et. al, 1983).

### Differences between elementary and secondary resource teachers

Although much of what has been discussed so far applies to both elementary and secondary resource teachers, there are some basic differences in their role definition and the school structures within which they operate (Bachor and Crealock, 1986). It is important, therefore, to examine these differences to determine whether or not there are differences in levels of stress, stressors, and degree of difficulty implementing resource teacher behaviours for elementary and secondary school resource teachers.

First of all, the nature of the client is more complex; adolescent needs are different from those of elementary school children as are teacher expectations. In addition,

specific discipline knowledge rather than skill development is heavily emphasized and the organization and structure of elementary and secondary schools differ greatly (Bachor and Crealock, 1986). All of these differences place different demands on the resource teacher's time and expertise and present a variety of difficulties to be overcome.

At the secondary school level, there are usually larger numbers of students and relatively few support personnel. Therefore, caseload is frequently higher than at elementary levels. Secondary school students, unlike elementary pupils may have upwards of six different teachers per year and so a resource teacher must negotiate course modifications and credits with individual subject teachers separately. The consultative-collaborative aspect of the job thus takes on higher proportions than at the elementary level and is therefore possibly a greater source of stress (Bachor and Crealock, 1986; Harris and Schutz, 1986).

Zigmond (1978) suggests that the secondary school resource teacher, in addition to assessing and programming effectively, is also faced with a host of indirect services falling into the area of consultation-collaboration. These include assessing the regular teacher's receptivity to change; communicating effectively with other teachers; analyzing the system under which they are working; analyzing the teaching style of regular teachers; understanding the content of curriculum well enough to suggest modifications

or changes in presentation and evaluation; analyzing textbooks; assuming the role of student advocate; communicating with parents and helping them to deal with their expectations for their adolescent; and consulting with community agencies which may be involved with the student. While these responsibilities may also be part of an elementary resource teacher's role definition, at the secondary level they become increasingly complex, in part because of the nature of adolescents, and in part because of the level of difficulty and specialization in specific subject areas. One would assume that these complexities might become stress producing factors.

Another difference noted between elementary and secondary resource roles falls into the affective domain. While elementary school resource teachers report feelings of isolation and alienation within their staffs, because of the size of secondary institutions and departmental organization which does not occur in elementary schools, secondary resource teachers may feel even more cut off from needed support and communication channels (Harris and Schutz, 1986).

### Summary

Based on the review of the literature, it would seem that there may be differences in stress levels and the nature of the stressors for regular classroom teachers and resource and special education teachers functioning in the



mainstream within a consultative-collaborative framework. This study will therefore focus on stress levels and those stressors, over and above "generic" teaching stressors, experienced by the 26 Resource teacher trainees as they move into more specialized functions within their schools. It will also investigate whether or not there are differences between elementary and secondary resource teachers in two areas - stress levels and the perceived degree of the difficulties encountered in implementing resource teacher behaviour.

## CHAPTER THREE

### Methodology

Chapter three describes the subjects, the instruments used for data collection, data collection procedures, research design, and limitations of the study.

### Subjects

This study began in February, 1989, with sixty subjects, all trainees selected proportionately from eight school districts by the Trinidad and Tobago Ministry of Education. All of them had previously attended the 1987-88 University of Manitoba - Trinidad and Tobago Special Education workshops. Based on excellence in a final workshop assignment involving the implementation of special education techniques in their schools, this group of 60 trainees was chosen by a Ministry of Education panel to participate in the Resource Teacher Training Program. Twenty-seven of the trainees taught at the secondary level and thirty-three at the elementary level. By the end of the study in November, 1989, however there were only 26 subjects remaining in the study, 5 at the secondary level, and 21 at the elementary level.

One possible explanation for the high mortality rate among secondary subjects is that most of them were not willing or able to engage in resource teacher activities in their schools. Secondary school teachers in Trinidad and Tobago are very content oriented, curriculum bound, and

lecturing is their preferred way of teaching. Breaking away from traditional methods of teaching and evaluating students is problematic without administrative support and encouragement. Unfortunately, very few secondary school principals were involved in the administrators' component of the University of Manitoba-Trinidad and Tobago Special Education project and therefore many of the secondary school trainees were without the kind of in-school supports necessary to implement change.

Out of the original group of 33 elementary subjects 5 were promoted to administrative positions shortly after their involvement in the program and therefore dropped out of the study. Two of the elementary trainees also retired from teaching during the progress of the study.

#### Instruments

Three instruments were used in this study: the Wilson Stress Profile (1979), the Holmes-Rahe Social Readjustment Rating Scale (1967), and the Resource Teacher Behaviour Scale (1988).

#### The Wilson Stress Profile (1979)

The Wilson Stress Profile was designed to help teachers more clearly define, on a self-scoring basis, areas and frequency of stress. It contains 36 items divided into 9 categories: Student Behaviour; Employee/Administrator Relations; Teacher/Teacher Relations; Parent/Teacher Relations; Time Management; Intrapersonal Conflicts;

Physical Symptoms of Stress; Psychological Symptoms of Stress; and Stress Management Techniques.

Respondents are asked to score items in terms of a period of time rather than specific days, and to circle on a 1-5 point scale , ranging from "never" to "very often", the frequency of occurrence. Scores are numerically calculated and graphed indicating low (1-8), medium (9-15), or high (16-20) stress levels in each of the 8 categories. Total overall scores are numerically calculated and graphed by totalling the scores from the 8 categories, resulting in overall low (36-72), medium (73-108), or high (109-180) stress levels.

This instrument was developed for use in a 1979 San Diego County, California, study of regular and special educators (Wilson, 1979). Wilson (1979) reported a mean total score of 93.73 for all teachers involved in his 1979 study. He also found a test-retest reliability coefficient of .68 and a rho value of .50 when the instrument was correlated with the State Trait Anxiety Index for validity purposes.

The Wilson Stress Profile for Teachers has subsequently been used as a measure in other studies relating to teacher stress. For example, it has been used in two studies comparing stress levels of regular and special educators (Beasley, 1984; Sutton and Huberty, 1984) and in a study examining relationships between four teacher efficacy belief

patterns and teachers' feelings of stress (Greenwood, Olejnik and Parkay, 1990). It has also been cited in a discussion of special education teacher burnout as an appropriate instrument for measuring teacher stress, and was used in a study of teacher stress and job satisfaction (Marozas and May, 1988; Sutton and Huberty, 1984). An adapted version of the scale was used by Kay-Cheng (1988) in a study examining teacher attitudes towards responsibility and teacher locus of control.

The Wilson Stress Profile was used in this study as a pre and post-test to measure the stress levels of the trainees prior to and during the implementation of resource programs in their schools.

#### Holmes-Rahe Social Readjustment Rating Scale (1967)

The Holmes-Rahe Social Readjustment Rating Scale was designed by a Dr. T. Holmes. M.D. (1967) to measure the amount of stress occurring in the "average" person's life over a twelve month period. It consists of 43 life events ranging from the death of a spouse, a major change in financial state to Christmas and minor violations of the law. Life events are listed from 1 to 43 with each event assigned a mean value from 100 to 11. Respondents are asked to examine each life event in terms of whether or not it applies to their life situation of the past year. They are then to assign themselves the given numerical score for each applicable event and when they have completed the scale, to

total their scores numerically. Composite scores under 150 indicate low stress levels, scores from 150-300 indicate medium stress levels and scores over 300 indicate high stress levels with a suggestion that the respondent scoring in this range may in fact be at risk for stress related illnesses.

Commonly administered in stress workshops, the Holmes-Rahe scale is used as part of the stress workshop materials of the Manitoba Teacher's Society and the Department of Fitness, Recreation and Sport, Government of Manitoba. It has also been used in a number of studies related to stress. In a study of psychosocial correlates of dropout and achievement in an adult high school completion program (Garrison, 1983) the Holmes-Rahe Scale was found to be the "best significant" predictor of dropout. It was also used as a measure in a study predicting success from non-cognitive variables (Blumberg, 1984). Two further studies, Mensh (1983) and Linden (1984) used modified versions of the Social Readjustment Scale as their primary instrument to determine the effects of life changes on academic performance and physical and psychological well being. In addition, a study on school leadership recommended the use of the Holmes-Rahe Scale to help orient administrators to common life stressors and their relative magnitude (Huffstutter and Smith, 1989). It was also used in a cross cultural study comparing cognitive appraisals and incident

ratings of urban American Indians, Anglo-Americans and Hispanics (Pine, 1985). A final study assessed whether accounting for variables in the scoring of the Social Readjustment Rating Scale would improve the predictive validity of the inventory.

This instrument was used in this study to take into account the possible effect of general life stressors on the post-test scores of the Wilson Stress Profile.

#### Resource Teacher Behaviour Scale (1989)

Since the exploration of resource teacher behaviours and stress is a relatively new area, it was necessary to design an original survey. This survey, the Resource Teacher Behaviour Scale (1989), was developed from information obtained from a review of the literature, the course content of the Trinidad and Tobago Resource Teacher Training Program, and discussions and interviews with practicing Resource Teachers, both elementary and secondary. Fifteen resource teachers and clinicians in Lord Selkirk School Division #11, Selkirk, Manitoba, completed the survey and made comments and suggestions on clarity, content and format. This assured the author of the validity of the instrument. Input into these three areas was also provided by the University of Manitoba Department of Educational Psychology. The scale was also piloted in Trinidad and Tobago and further adjustments made where necessary. Application of the Spearman rho showed a test re-test

reliability coefficient of .36. The low number of subjects and the small variation may account for these test re-test reliability results.

The scale, comprised of 18 items, measures perceived degrees of difficulty in implementing resource teacher behaviours in the three major areas of resource teacher responsibility: diagnosis and assessment; design and implementation of IEPs; and consultation-collaboration.

The scale is self-scored, with respondents scoring items on a 0-5 point scale in terms of frequency of occurrence. 0 indicates that the stimulus does not apply and 5 indicates that the behaviour occurs very often. Scores in each of the three categories are numerically calculated and graphed indicating high (19-30), medium (10-18), and low (1-9) levels of difficulty implementing Resource Teacher behaviours. Overall scores are numerically calculated by totalling the scores from the three categories indicating overall high (55-90), medium (37-54) or low (18-36) levels of difficulty implementing resource teacher behaviours.

#### Procedure

The study began in Trinidad in February 1989, at the beginning of the Resource Teacher Training Program. The Wilson Stress Profile and the Holmes-Rahe Social Readjustment Scale were group administered to the 60 trainees as pre-tests of stress levels prior to the beginning of the training sessions.



During the workshop, participants were exposed to the Resource Teacher Concept, the detailed training objectives and curricula of which are appended (Appendix 2). The trainees were expected to start implementing their programs in the second semester of school, immediately after the first workshop was completed.

The Wilson Stress Profile and Holmes-Rahe Social Readjustment Scale were readministered in a group setting in June, 1989. The trainees were also asked to complete the Resource Teacher Behaviour Scale at that point in time.

A further group administration of all three instruments took place in November, 1989, so that stress levels and implementation difficulties were recorded over both the initial implementation stage and the stage at which the concept was no longer new to the trainees. In addition, 5 trainees were interviewed as a followup to the second set of post tests to discuss their stress levels and stressors in depth. Additional trainees were also visited in their schools.

#### Design

A pre-post research design was used to examine the effects of the Resource Teacher Training Program as measured by the Wilson Stress Profile, the Holmes-Rahe Social Readjustment Scale and the Resource Teacher Behaviour Scale, to determine whether or not there had been any changes in the stress levels and perceived degrees of difficulty in

implementing resource teacher behaviours, in the main group of trainees. Inferential analysis was not applied to the eight sub-groups, however, since no significant differences were found in the main group of trainees. The Friedman two way analysis of variance by ranks (one tailed) with a significance level of  $p = .05$  was used to test for differences between pre and post tests of both the Wilson Stress Profile and the Holmes-Rahe Social Adjustment Scale. The Friedman test for  $k$  related samples is a method of testing whether 3 or more matched sets of frequencies differ significantly among themselves. The matching may be based on the fact that the same subjects are used under different conditions as is the case in this study.

b. The three different conditions are as follows:

- i. Pre-test February, 1989
- ii. Post-test June, 1989
- iii. Post-test November, 1989

The eight subgroups were treated as independent groups since they differed in size and composition. The most appropriate test for measuring differences between pairs of these eight sub-groups on both the Wilson Stress Profile and the Resource Teacher Behaviour Scale was seen to be the median test, which can be used to determine whether two independent groups, not necessarily of the same size, differ in central tendencies. As indicated earlier, however, this test was not applied to any of the sub-groups for either

instrument. The eight sub-groups were as follows:

Group 1 - Entire group	N = 26
Group 2 - Elementary teachers	N = 2
Group 3 - Secondary teachers	N = 5
Group 4 - Implementation of program in own classroom only	N = 11
Group 5 - School wide implementation of program	N = 15
Group 6 - Classroom implementation only Elementary	N = 10
Group 7 - School wide implementation Elementary	N = 11
Group 8 - Classroom implementation Secondary	N = 1
Group 9 - School wide implementation Secondary	N = 4

Since there were only two administerings of the Resource Teacher Behaviour Scale, use of the Friedman test for k related samples was not appropriate. Therefore, the Wilcoxin matched pairs signed-ranks test was selected to test for differences in magnitude and direction between the two administerings of the Resource Teacher Behaviour Scale. The Spearman rho was also applied to Conditions 1 and 2 of the Resource Teacher Behaviour Scale to establish test re-test reliability.

Descriptive statistics, including graphs and three dimensional histograms to investigate possible reasons for differences in stress levels and difficulties in implementing resource teacher behaviours were also examined. Since non-parametric measures were applied, the median was used as the most appropriate measure of central tendency.

Diagrammatically the overall design can be represented as follows:

Figure 1. DESIGN OF THE STUDY

Total sample		Sub-groups							
Pre-test February 1989	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Group 9
		Elementary	Secondary	Classroom	School	Classroom Elementary	School Elementary	Classroom Secondary	School Secondary
	N=60	N=33	N=27	N=?	N=?	N=?	N=?	N=?	N=?
	A ↓ 60	A ↓ 33	A ↓ 27	A ↓ ?	A ↓ ?	A ↓ ?	A ↓ ?	A ↓ ?	A ↓ ?
	B ↓ 60	B ↓ 33	B ↓ 27	B ↓ ?	B ↓ ?	B ↓ ?	B ↓ ?	B ↓ ?	B ↓ ?
February - June 1989 Treatments Resource Teacher Program									
Post-test June 1989	A ↓ 60	A ↓ 33	A ↓ 27	A ↓ ?	A ↓ ?	A ↓ ?	A ↓ ?	A ↓ ?	A ↓ ?
	B ↓ 60	B ↓ 33	B ↓ 27	B ↓ ?	B ↓ ?	B ↓ ?	B ↓ ?	B ↓ ?	B ↓ ?
	C ↓ 60	C ↓ 33	C ↓ 27	C ↓ ?	C ↓ ?	C ↓ ?	C ↓ ?	C ↓ ?	C ↓ ?
Interviews conducted with 5 trainees									
Post-test December 1989	A ↓ 60	A ↓ 33	A ↓ 27	A ↓ ?	A ↓ ?	A ↓ ?	A ↓ ?	A ↓ ?	A ↓ ?
	B ↓ 60	B ↓ 33	B ↓ 27	B ↓ ?	B ↓ ?	B ↓ ?	B ↓ ?	B ↓ ?	B ↓ ?
	C ↓ 60	C ↓ 33	C ↓ 27	C ↓ ?	C ↓ ?	C ↓ ?	C ↓ ?	C ↓ ?	C ↓ ?

- A. Wilson Stress Profile (Friedman two-way analysis of variance)
- B. Holmes-Rahe Social Readjustment Scale (Friedman two-way analysis of variance)
- C. Resource Teacher Scale (Wilcoxin signed ranks tests)

### Limitations of the study

The results of this study should be viewed in context of the following limitations.

#### Internal validity

Examining this study in light of the threats to internal validity identified by Campbell and Stanley (1971), cited in Gay (1987), a number of limitations become evident.

##### History

It is very difficult to control for history since there is only one group of subjects involved. However, an attempt to account for general life stressors, unrelated to job performance, was included by the use of the Rahe-Holmes Social Readjustment Scale (1967) as part of the instrumentation.

##### Regression

Since the subjects were not randomly selected, regression factors are not controlled for.

##### Selection

While only one main group i.e. the 26 trainees used in this study, the main group itself is comprised of elementary and secondary teachers, who in Trinidad differ greatly in the quality and length of their training.

##### Mortality

There were originally 60 subjects involved in this study - 27 secondary teachers and 33 elementary teachers. By

the final round of testing in November, 1989, only 26 subjects remained - 5 secondary teachers and 21 elementary teachers. The low number of secondary teachers remaining in the study is a limiting factor and results must be viewed in this light.

#### External validity

##### Specificity of variables

There are obvious limits to the generalizability of this particular study. The University of Manitoba - Trinidad and Tobago Ministry of Education's Resource Teacher Training Program is unique in its educational, economic and cultural settings.

## CHAPTER FOUR

### Results and discussion of results

This chapter presents and discusses the research findings. Each of the hypotheses is presented, followed by descriptive and non-parametric analyses. Discussion of the research findings follows.

#### Hypothesis 1

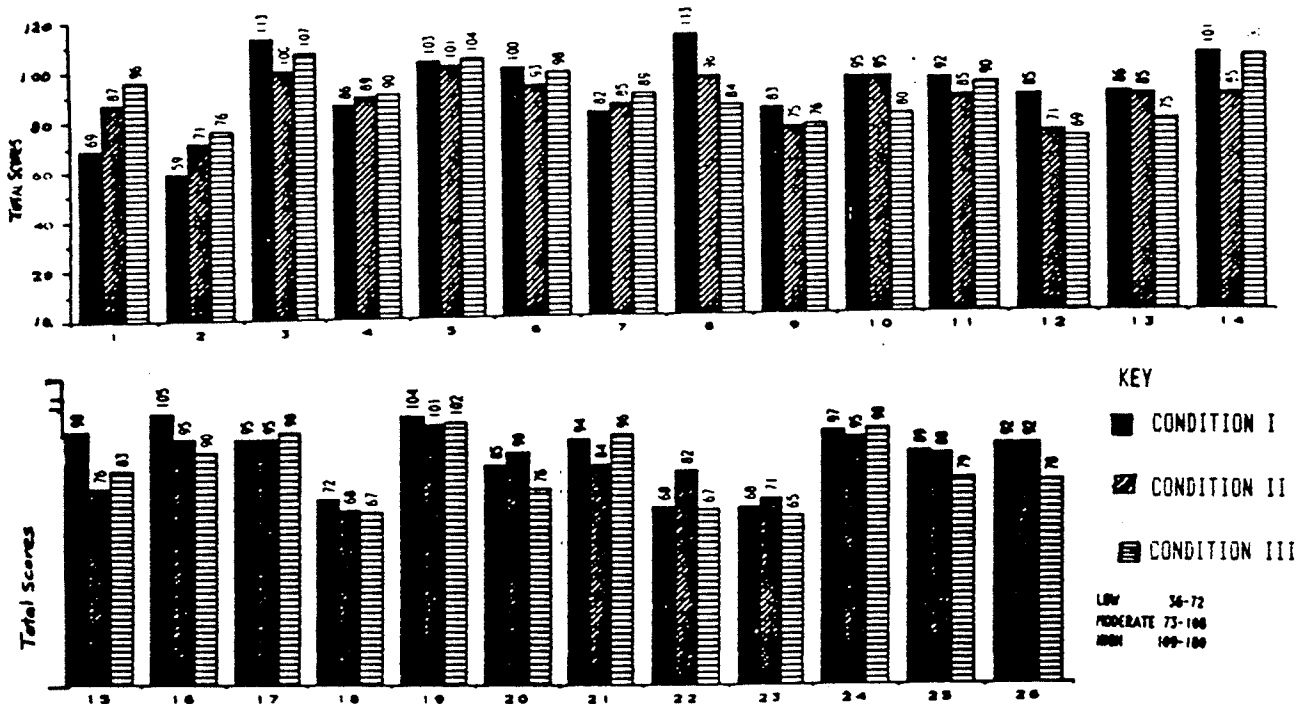
As the 26 Resource Teacher Program trainees begin to practice resource teacher behaviours, their overall stress levels will increase significantly as measured by pre and post-profiles using the Wilson Stress Profile. The pre-profile, administered in February, 1989, will provide a baseline measurement of the trainees' stress levels.

#### Descriptive analysis

Descriptive analysis reveals some variation in trainees' overall stress levels.



Figure 2. Wilson Stress Profile: Results of the three conditions.



Analysis of Figure 2, showing individual totals on all three conditions, shows the following:

1. Six of the subjects showed a steady decrease in stress levels over the three conditions (Subjects 8, 12, 13, 16, 18, 25).
2. Four of the participants (Subjects 1, 2, 4, 7) showed an increase in stress levels over each successive administration of the Wilson Stress Profile.
3. Three participants (Subjects 5, 21 and 24) showed a drop in their stress levels under Condition II but

an increase over both Conditions I and II in Condition III.

4. Seven of the subjects (Subjects 3, 6, 9, 11, 14, 15, 19) showed a decrease in stress levels under Condition II but an increase under Condition III. The increase under Condition III did not reach the same level shown under Condition I.
5. Ten subjects (cited in #3 and # 4 above) therefore showed a decrease in stress levels under Condition II and a subsequent increase under Condition III.
6. Two subjects (Subjects 10 and 26) showed identical stress levels under Conditions I and II, but a decrease in stress levels under Condition III.
7. Three subjects (Subjects 20, 22, 23) showed an increase in stress levels under Condition II but a decrease under Condition III.
8. One subject (Subject 17) showed identical stress levels under Conditions I and II and increase under Condition III.

#### Non-parametric analysis

Application of the Friedman two analysis of variance by ranks yielded a probability of .066 (Table 1). Since the p was pre-set at .05, the null hypothesis was accepted.

Table 1

Friedman two-way analysis of variance results  
Wilson Stress Profile Conditions I-III

Variable	Rank sum	<u>df</u>	Xr	Probability	Significance
Condition I	61.5	2	5.44	.066	$p = > .05$
Condition II	45.5				
Condition III	49.0				

### Discussion of research results of hypothesis 1

There are a number of conclusions that might be drawn from both the descriptive and inferential analyses of the Wilson Stress Profile. First of all, one might conclude that teachers implementing consultative-collaborative resource programs in their schools do not experience any significant increase in stress, therefore confirming existing research that resource teachers do not experience greater stress levels than do regular classroom teachers. However, a number of factors surrounding the implementation of Resource Teacher behaviours by the 26 participants suggest that this conclusion may not be valid.

First of all, while the intent of the Resource Teacher Program was to train participants to implement a consultative-collaborative resource model in their schools, this in fact did not happen. Resource Teacher Behaviour Scale comments, interviews with five of the subjects and four days of school visitations revealed that the majority of those indicating that they were implementing on a school-wide basis did so using a pull-out resource room model, in many cases focussing almost entirely on reading skills. Five of the trainees who were released from classroom responsibilities to implement a resource room model of service delivery, scheduled students into the resource room at regular intervals. The five participants interviewed, indicated that they operated, for the most part, in

isolation from classroom teachers, designed their own programs focussing on basic skills, and did not collaborate with teachers to develop individualized education programs. All five felt that they were to some degree viewed by teachers as "fixer uppers" not as partners working together to improve children's skills in the classroom.

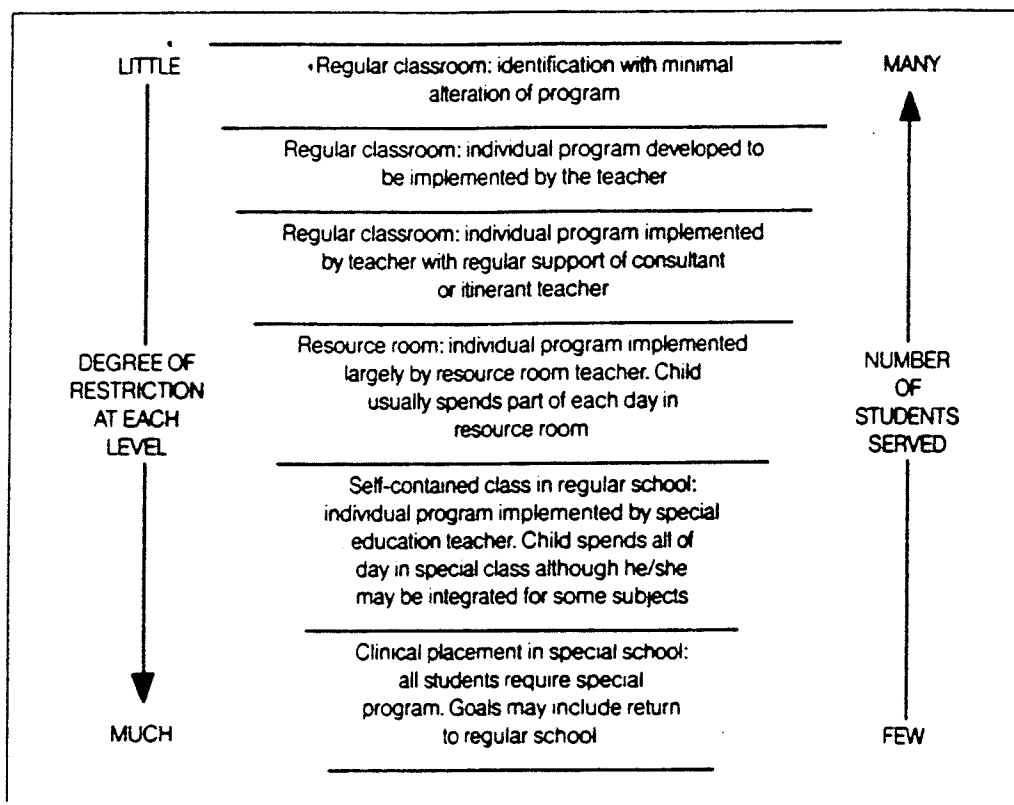
Those trainees trying to operate on a schoolwide model, but not released from classroom responsibilities, also set up resource rooms and saw students on a pull-out basis whenever their schedule permitted them to be freed from classroom duties. In some cases, they also arranged for other teachers to help students in the resource room during lunch hour and before and after school. The comments made on the Resource Teacher Behaviour Scale indicate, however, that many of them found it impossible to run a resource program under these conditions and therefore limited the kinds of resource teacher behaviours in which they engaged. Very little in the way of consultation and collaboration took place.

For example, in two of the junior high schools, reading tests were administered to the entire group of first year students. Those students scoring at the low end of the scale were scheduled into the resource room for help with basic reading skills. The focus seemed to be on phonics and literal comprehension with little, if any, work done on more generic reading strategies. Little attempt was made to

engage classroom teachers in dialogue as to the kinds and levels of reading these first year students were expected to perform on a daily basis in their regular classrooms.

When we look at the development of special education in other countries, we see an evolution from hospital and special school settings to regular classroom placement with built in supports. The following model of service alternatives is a good representation of special education

**Figure 3. Service alternatives for exceptional students**



Adapted from Bachor and Crealock (1986, p. 364).

It has been only in the past ten years that Canadian educators have started to move towards a consultative-collaborative resource model and away from self contained classrooms and exclusively pull out resource models. For example, adolescent special education students in Lord Selkirk School Division, Selkirk, Manitoba, were in self-contained classrooms until 1987-88 (Lord Selkirk School Division #11, 1987). In Seven Oaks School Division, Winnipeg, Manitoba, it has only been in the past school year, 1990-91, that a concerted effort has been made in several elementary schools to move away from a pull-out system towards a consultative-collaborative resource model (Seven Oaks School Division #10, 1990). It is not surprising therefore, that the Trinidad and Tobago special educators, who were presented with a variety of resource service delivery systems chose to operate with a pull-out model.

Perhaps another factor influencing trainees' practice is the belief, not peculiar to these particular trainees, that a resource program needs a resource room. Those participants interviewed, and others who were visited in their schools seemed to take particular pride in the actual physical space they were allocated and had gone to great trouble to acquire resource materials for their rooms and to make them as inviting as possible for students. The resource rooms visited were well equipped, and contained many manipulative materials unseen in regular classrooms. Many of the resource

room teachers had involved parents and community organizations in their programs. For example, one resource teacher was able to provide a variety of services from physicians, social agencies and businesses to her students. Another was in the process of raising funds to equip her room with a computer. To many of the trainees, therefore, the resource room setting itself became an integral part of their program.

Another explanation for the results of the descriptive and non-parametric analyses of the Wilson Stress Profile may be that the subjects did not significantly change the way they were operating in their schools. As mentioned earlier in this study, very little in the way of administrative supports were built into the project. Trainees received little in the way of encouragement from either their principals or school supervisors. In addition, there was minimal accountability for their implementation of the program. An independent evaluation of the project suggested that an advisory body, mandated to supervise project activities and provide input from all parties involved, would have contributed positively to the success of the project and to the trainees' attempts to implement their school-based programs (Palmer, 1990). However, no such body existed and trainees were basically left to develop their programs in isolation.

Theoretically this isolation should not have occurred.



An integral part of the project was the training of Trinidad and Tobago co-tutors, who visited Manitoba and took part in the delivery of the Resource Teacher Program in Trinidad and Tobago. The intent was that after the workshops were over, they would, throughout the year, visit the trainees in their schools and offer ongoing support and in-service training sessions. This in fact did not happen on a systematic basis. Co-tutors, for the most part, were unable to get release time to make school visitations or to offer in-service training sessions. An additional complicating factor was that many of the co-tutors received their training at institutions other than universities and the hierarchical and centrally controlled educational system operating in Trinidad and Tobago made it difficult for them to receive in-school support and encouragement. There was no timely and systematized guidance and direction provided from the Special Education Unit, principals and school supervisors.

Taking into account all of these contextual factors, it is not surprising that many of the trainees did not substantially change their intervention practices and this may have affected the outcome of the study.

### Hypothesis 2

There will be a difference in stress levels as measured by the Wilson Stress Profile between trainees implementing resource teacher behaviours on a school-wide basis, and trainees implementing resource teacher behaviours in their own classrooms only.

### Descriptive analysis

When we look at the descriptive statistics we see that there is a difference in the stress levels of the two sub-groups - those implementing resource teacher behaviours in their own classroom (Group 4) and those implementing on a school-wide basis (Group 5).

**Figure 4.** Resource Teacher Behaviour Scale: Implementation of Resource Teacher Behaviours by sub-groups.

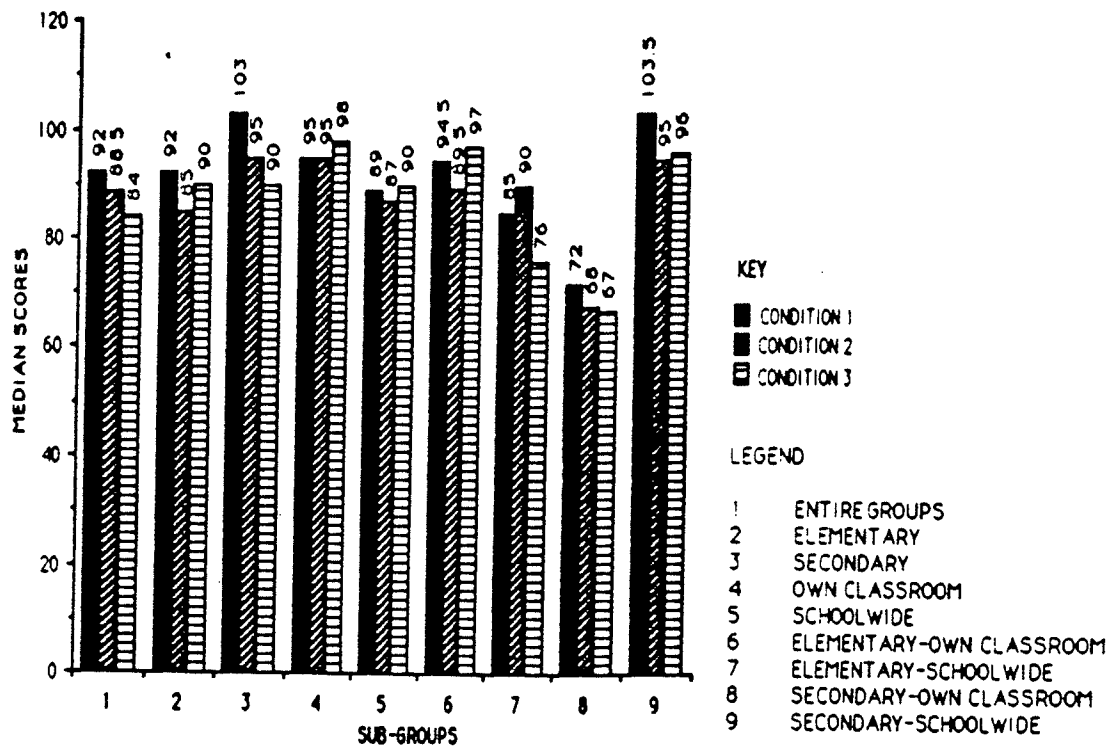


Figure 4 shows that those subjects implementing resource teacher behaviours in their own classroom show higher stress levels than those implementing on a schoolwide basis.

#### Non-parametric analysis

Since the first alternate hypothesis was rejected because no significant change in overall stress levels was established, the planned statistical tests were not performed on any of the subgroups. It is therefore not possible to determine whether or not statistically

significant differences exist between the stress levels of those trainees implementing on a school-wide basis and those trainees implementing in their own classrooms only.

#### Discussion of research results of hypothesis 2

As discussed earlier, the intent of the training program was to have trainees implement a consultative collaborative resource program on a school-wide basis, if possible. It was assumed that if trainees did so, they would be working with an entire staff and that therefore their stress levels would increase. Figure 4 shows that in fact the opposite happened.

The group implementing on a classroom only basis show stress levels higher than those implementing on a schoolwide basis. Both groups, however, show stress levels under Condition III that are higher than either Condition I and II. One possible explanation for these results is that implementing a resource program on a school-wide is less stressful for teachers than implementing a resource program within their own classrooms. This conclusion, however, is not borne out by the literature which suggests that one of the major stressors of resource teachers is the working out of consultative-collaborative relationships with other teachers.

Another, more likely explanation is that those teachers operating schoolwide did not in fact fully operate on a consultative-collaborative basis. In fact, according to participant comments on the Resource Teacher Behaviour

Scale, a large number of them did not implement many of the resource teacher behaviours because of limited time and classroom responsibilities. For the most part they operated reading labs with small groups of children timetabled into the resource room. This kind of program structure could have been a factor in their lowered stress levels.

Many of those teachers who operated on a classroom basis only, were, because of their involvement in the program and their resultant perceived expertise, assigned to classes composed almost entirely of students experiencing learning difficulties. One trainee reported being assigned a class of 29 students, ranging in age from 7 to 13. None of these students was operating above a grade three reading level, and several of them were still at the pre-primer stage. It is not surprising that under these circumstances that the stress levels of teachers implementing resource teacher behaviours in their own classrooms were higher than those implementing on a schoolwide basis.

### Hypothesis 3

There will be a positive relationship between stress levels and the perceived degree of difficulty encountered by all trainees as they attempt to implement resource teacher behaviours as presented in the Resource Teacher Program. The stress levels will be measured by pre and post use of the Wilson Stress Profile while the degree of difficulty in implementing

resource teacher behaviours will be measured by two post-tests using the Resource Teacher Behaviour Scale. The perceived degree of difficulty in implementing resource teacher behaviours will increase from the first administration of the Resource Teacher Behaviour Scale in June, 1989, to the second administration of the same instrument in November, 1989.

#### Descriptive analysis

Comparison of results of Wilson Stress Profile and Resource Teacher Behaviour Scale

Table 2 compares stress levels and perceived degree of difficulty as calculated using total individual scores from both the Wilson Stress Profile post-tests (WSP), Conditions II and III, and the Resource Teacher Behaviour Scale (RTBS), Conditions I and II, administered at the same time in June, 1989 and November, 1989.

Table 2

Comparison of perceived degree of difficulty (RTBS)  
and stress levels (WSP)

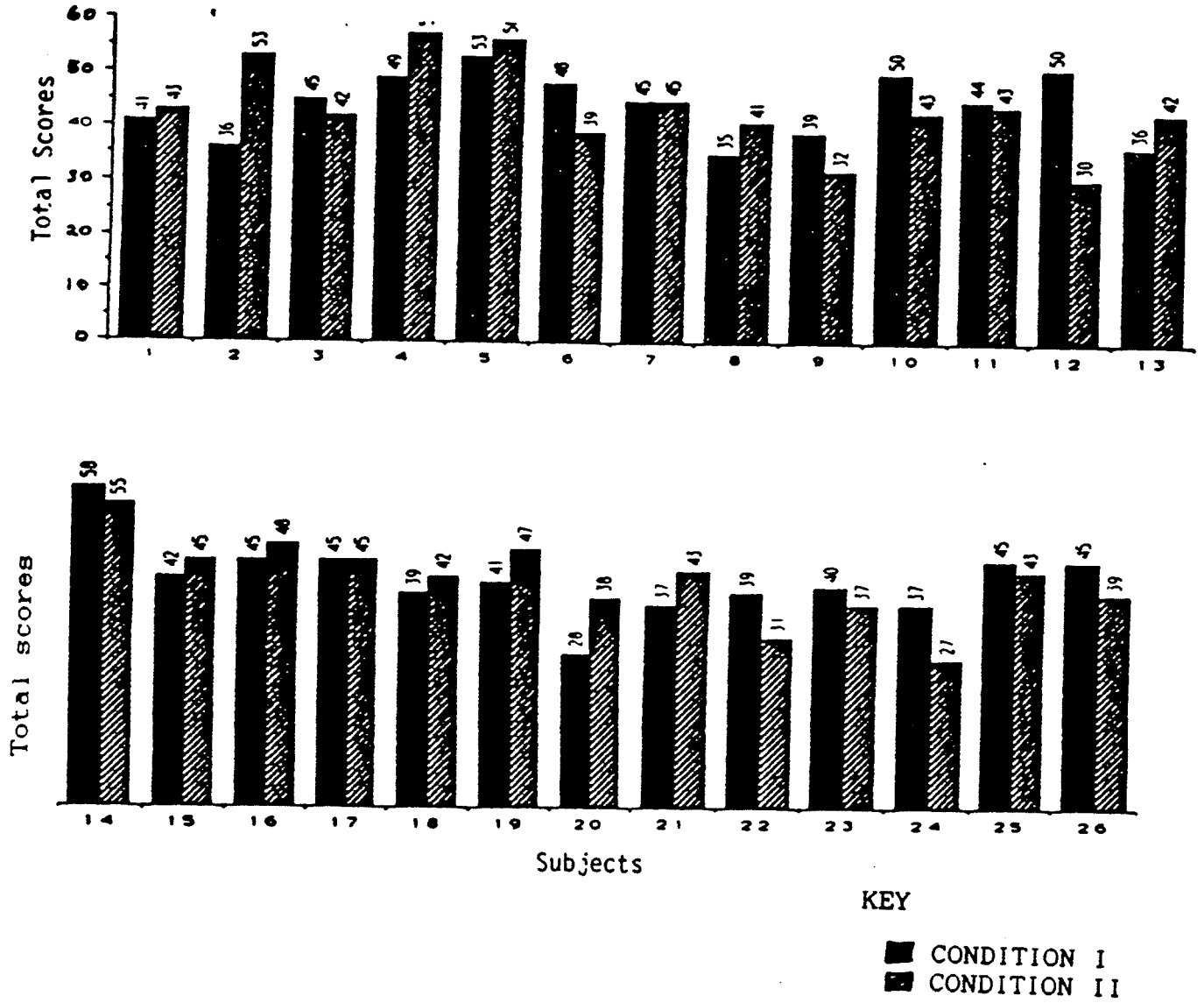
		RTBS	WSP
<u>June 1989</u>	Low	4	4
	Moderate	20	22
	High	2	0
<u>November 1989</u>	Low	4	4
	Medium	21	22
	High	1	0

Table 2 reveals that the majority of respondents scored within the moderate range on both the Wilson Stress Profile and Resource Teacher Behaviour Scale under both Conditions I and II.

Descriptive statistics on results of Resource Teacher Behaviour Scale Conditions I and II

Descriptive analysis of Figure 5 reveals some interesting variations in the perceived degree of difficulty encountered by trainees.

Figure 5. Resource Teacher Behaviour Scale:  
Results of the two conditions





Examination of Figure 5 shows the following:

1. Twelve of the subjects showed an increase in the perceived degree of difficulty encountered in implementing resource teacher behaviours in Condition II (Subjects 1,2,4,5,8,13,15,16,18,19,20,21)
2. Twelve of the subjects showed a decrease in the perceived degree of difficulty in implementing resource teacher behaviours in Condition II (Subjects 3,6,9,10,11,12,14,22,23,24,25,26)
3. Two of the subjects showed identical perceived degrees of difficulty in Conditions I and II (7,17)

Descriptive analysis of the sub-sections of the Resource Teacher Behaviour Scale also shows some variations in results. Condition II resource teacher behaviours associated with diagnosis and assessment score the highest. Under Condition II, the medians for diagnosis and assessment behaviours and consultation and collaboration behaviours are identical. The third highest area of difficulty is consultation and collaboration under Condition I. Planning and implementation scores lowest on the scale.

Diagnosis and assessment behaviours show a decrease under Condition II while consultation and collaboration behaviours show an increase under Condition II. Planning and implementation behaviours also show an increase under Condition II.

Non-parametric analysis

Non-parametric statistics were not used to determine a relationship between the Wilson Stress Profile and the Resource Teacher Behaviour Scale.

Application of the Wilcoxin signed ranks test to Conditions I and II of the Resource Teacher Behaviour Scale, yielded a probability of .808 (Table 3). Since the p was pre-set at .05 the null hypothesis was accepted.

Table 3

Wilcoxin signed ranks test results for  
Resource Teacher Behaviour Scale Conditions I - II

Two sided probabilities		
	Condition I	Condition II
Condition I	1.0	
Condition II	0.808	1.0
Probability	Level of significance	
.808	$p = > .05$	

Discussion of research findings for Hypothesis 3

Discussion comparing results of Wilson Stress Profile and the results of the Resource Teacher Behaviour Scale. When we compare the results of the Wilson Stress Profile post-tests and the results of the two administerings of the Resource Teacher Behaviour Scale (Table 2, p.58) we see that subjects' stress levels and perceived degree of difficulty in implementing resource teacher behaviours are similar. In February, 1989, both instruments register four subjects in the low category, 20 subjects fall within the moderate range on the Resource Teacher Behaviour Scale, and 22 fall within the moderate range on the Wilson Stress Profile. Two subjects fall within the high range on the Resource Teacher Behaviour Scale with none in this category on the Wilson Stress Profile. In November, 1989, four subjects register as low on both of the instruments, 21 register as moderate on the Resource Teacher Behaviour Scale, and 22 register as moderate on the Wilson Stress Profile. Only one subject registers as high on the Resource Teacher Behaviour Scale, with no subjects in this category on the Wilson Stress Profile.

Not only is the distribution of results similar but in three out of four cases the subjects who register either as low and moderate on one scale, register as either low or moderate on the other.

The breakdown, extrapolated from Figures 2 and 5 is as follows:

1. Subject 2 scores within the low range under both Conditions on both scales
2. Subject 12 scores as low on the RTBS under Condition II and low on the WSP under both conditions
3. Subject 22 registers as moderate in both scales in June, 1989 and low on both scales in RTBS in November 1989.

These results, particularly in the low and moderate range, suggest that there may be a relationship between stress levels and perceived degree of difficulty in implementing resource teacher behaviours.

Discussion of research results of the Resource Teacher Behaviour Scale Conditions I-II

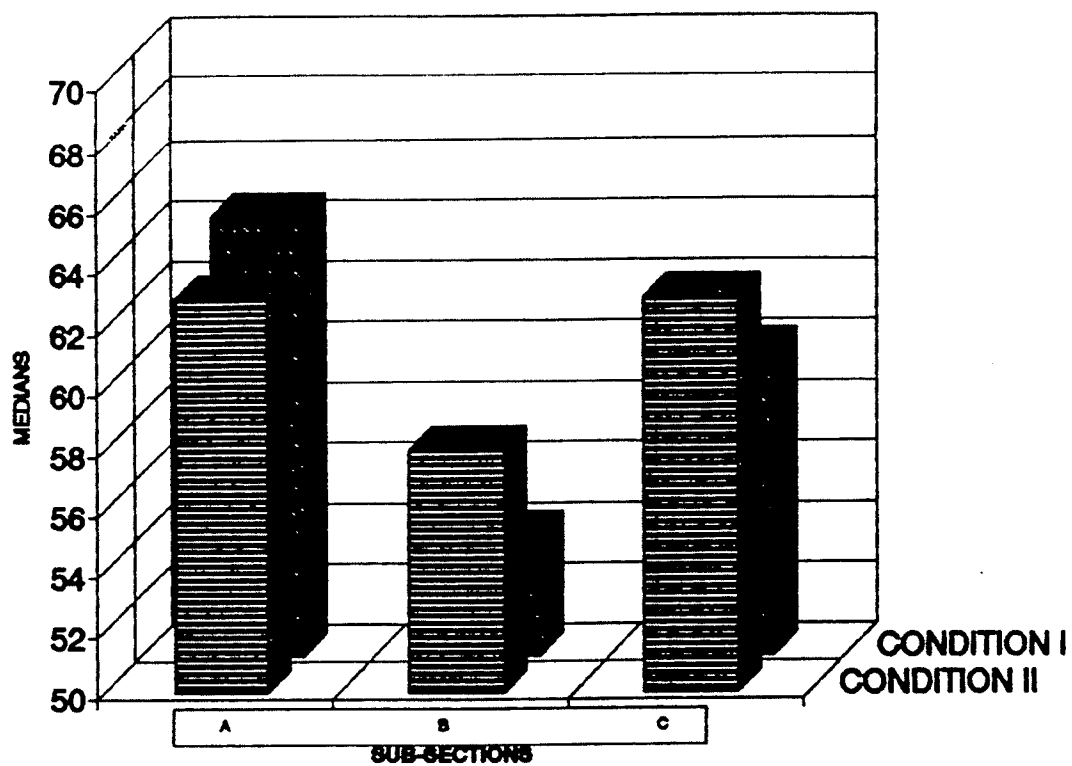
Descriptive analysis of the research results of the Resource Teacher Behaviour Scale shows some variations worth examining in detail. Twelve subjects showed a decrease over Conditions I and II in their perceived level of difficulty in implementing resource teacher behaviours. However, an equal number, twelve subjects, showed an increase in their perceived levels of difficulty. Two subjects remained at a constant level under both Conditions I and II.

It is possible that the twelve who evidenced higher perceived levels of difficulty in Condition I mastered well the kinds of tasks required to function daily as resource

teachers. Their perceived levels of difficulty therefore dropped in Condition II. It is also possible, however, that after initial attempts to implement resource teacher behaviours, they found for a variety of reasons cited earlier, that it was impossible to continue at the same pace. Those twelve subjects who showed an increase in perceived levels of difficulty over Conditions I and II may have started slowly and as they increased their resource teacher activities began to experience more difficulty in implementing certain behaviours.

When we look at the three subsections of the Resource Teacher Behaviour Scale on Figure 6 - diagnosis and assessment, planning and implementation and consultation and collaboration - we also see some variation in perceived levels of difficulty.

Figure 6. Resource Teacher Behaviour Scale:  
Comparison by sub-sections



LEGEND: A. Diagnosis and planning (1,2,4,6,9)  
 B. Planning and implementation (10,12,14,15,18)  
 C. Consultation and collaboration (3,8,11,13,16,17)

Diagnosis and assessment emerge as providing the highest level of perceived difficulty for the trainees. This result reflects concerns voiced by trainees in all three workshops. They felt competent to assess difficulties in some curriculum areas, for example mathematics, but were very uncertain in such areas as reading and writing. The decrease in perceived levels of difficulty in Condition II could reflect increased confidence gained through practice. On the other hand, it may reflect a decrease in the kinds of diagnostic and assessment functions they were able to perform because of reasons cited earlier. Diagnosis and assessment also rates high in the literature on the list of resource teacher stressors (Bensky et. al., 1980; Weiskopf, 1980; Holland, 1982; Raschke et. al., 1988).

It is interesting that the teacher-teacher relations subsection of the Wilson Stress Profile show the second lowest source of stress for trainees and yet on the Resource Teacher Behaviour Scale consultation-collaboration activities rank second in terms of perceived degree of difficulty. Perhaps this is because the questions on the Wilson Stress Profile refer to more generic kinds of teacher-teacher relations, while those on the Resource Teacher Behaviour Scale are more germane to the kinds of relationships resource teachers must develop with other staff members in order to improve student learning. The increase in perceived levels of difficulty in implementing



consultative-collaborative behaviours evidenced over Conditions I and II suggest that perhaps trainees were more involved with other teachers and their students as time progressed.

The third subsection, planning and implementation, scores the lowest on the Resource Teacher Behaviour Scale, but trainees do show an increased level of perceived degree of difficulty over Conditions I and II. Perhaps this category scores lowest because in many cases trainees were operating a pull out resource model and only dealing with small groups of children at a time in a fairly structured setting. Many of these teachers started setting up resource rooms in March of 1989 and began offering resource services on a small scale until June 1989. They would not have been engaged in full scale resource programs until September 1989. The increase in perceived levels of difficulty in implementing resource teacher behaviours could therefore be explained by this timing of events. Those teachers who were working within their own classroom with a group of special needs students would not have been assigned their classes until September, 1989, and so difficulties in planning and implementation would not have shown up until Condition II.

Application of non-parametric statistics, the Wilcoxin signed ranks test, to the Resource Teacher Behaviour Scale found no significant difference in perceived degree of difficulty in implementing resource teacher behaviours under

Conditions I and II. Earlier discussions have touched on a number of reasons which may have affected this outcome, two of which probably had a major effect on these results - limited implementation, and use of a pull out model as opposed to a consultative collaborative model. The questions on the Resource Teacher Behaviour Scale were designed to measure consultative-collaborative behaviours. Participants were asked to score on a scale of 0-5 the perceived degree of difficulty they were experiencing in the implementation of these behaviours. The 0, indicating not applicable, was included to differentiate between elementary and secondary behaviours. For example, timetabling difficulties should not have affected elementary school trainees but should have affected the functioning of secondary trainees. Analysis of the questionnaires reveals, however, that respondents used the 0 to indicate those behaviours which they were not implementing and a number of 0 responses reveal certain inconsistencies. For example, some subjects indicated, using the 0 response, that they were not involved with other teachers and yet further on in the questionnaire they responded with answers other than 0 to consultation-collaboration questions involving other teachers. Despite the inconsistencies, however, the number of 0 responses indicates that many of the trainees were not operating in a consultative-collaborative mode, but a pull-out one, and implemented only a limited number of resource teacher

behaviours. The scale itself, although it reflects the kinds of resource teacher behaviours that were presented in the workshops, did not reflect the kinds of behaviours in which the trainees were actually involved.

#### Hypothesis 4

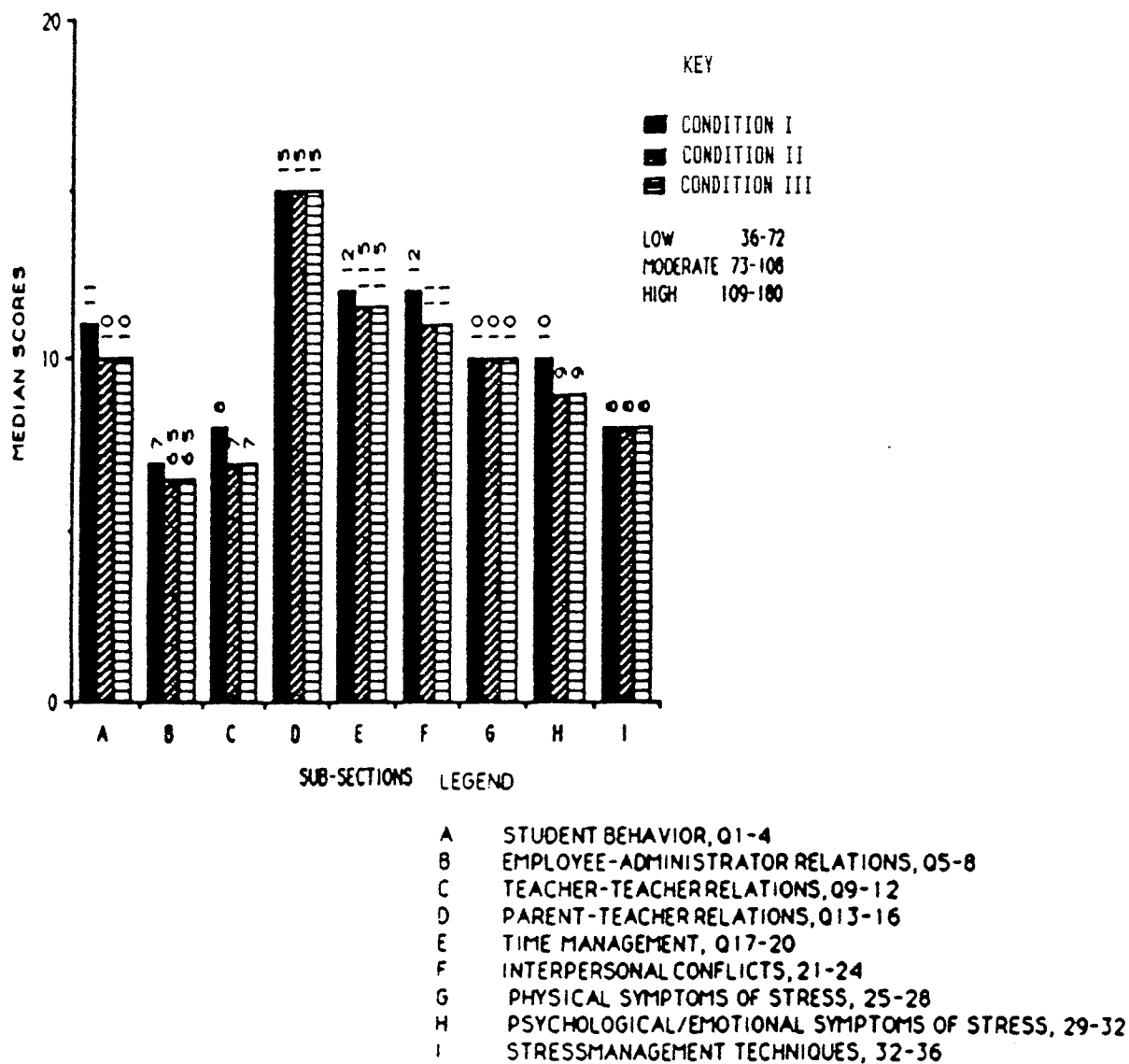
The nature of the stressors experienced by the trainees will change specifically in relationship to their roles as resource teachers functioning in a consultative-collaborative resource model. Specifically, the trainees' stress levels under the categories of Employee/Administrator relations, Teacher/Teacher relations, Time Management, Parent/Teacher Relations and Intrapersonal Conflict, as measured by the Wilson Stress Profile for Teachers, will increase on the post-profiles after they assume their resource functions in their schools. The pre-profile administered in February, 1989, will serve as a baseline measurement for stress levels in these five areas.

#### Descriptive analysis

When we look at the descriptive statistics in Figure 7 we see that three of the five categories anticipated as being sources of stress - parent-teacher relations, time-management and intrapersonal conflicts - emerge as the three highest stressors on the Wilson Stress Profile. The

other two categories, employee-administrator relations and teacher-teacher relations present as low sources of stress.

Figure 7. Wilson Stress Profile: Comparison by sub-sections.



#### Parent-teacher relations

The highest source of stress fell in the area of parent-teacher relations, one of the sub-sections anticipated to be a major source of stress. The highest possible score in each category is 20 and as we can see on Figure 7, the median score for this subsection was 15 under each of the three conditions.

#### Time management

The subsection of the Wilson Stress Profile scoring the next highest is time-management, with medians of 12 under Condition I and 11.5 under both Conditions II and III. Time management is also a factor cited by resource teachers in North America as being a major source of stress (Raschke et. al., 1988). It was anticipated in this study that stress levels in this area would increase over the three conditions. This was not the case, since in Conditions II and III there was a drop in median from 12 to 11.5.

#### Intrapersonal conflicts

Intrapersonal conflicts emerged as the third highest source of stress for participants, with a median of 12 under Condition 1 and identical medians of 11 under Conditions II and III.

#### Teacher-teacher relations and employee-administrator relations

Teacher-teacher relations emerged as the second lowest stressor under all three conditions with medians of 8 under

Condition I, and 7 under both Conditions II and III. Employee-administrator relations emerged as the least stressful section of the Wilson Stress Profile with medians of 7 under Condition I and 6.5 under both Conditions II and III.

#### Non-parametric analysis

Again, because no significant change in stress levels was established, non-parametric statistics were not applied to the sub-sections of the Wilson Stress Profile.

#### Discussion of research results of Hypothesis 4

##### Parent-teacher relations

Interviews with 5 of the trainees and discussions with trainees visited in a number of schools revealed that a variety of factors surrounding parent-teacher relations are sources of stress. Accountability is an issue, with many teachers feeling extremely apprehensive and frustrated about high parental expectations and low academic performance on the part of students. Many parents blame the school system in general, and teachers, in particular, for the high failure rate. Much parental pressure is placed on teachers to train students well enough to pass the Common Entrance examinations written at age 11. Schools and teachers tend to be evaluated according to the number of students who pass the Common Entrance. Parents exert a great deal of pressure for teachers to hold extra classes and provide tutorial services for students who will be writing this exam. At the

junior high school level, students write the CXC examination for placement in senior secondary schools and similar pressures are placed on teachers by parents.

Societal factors also affect teacher relations with parents. Many students come from relatively poor and uneducated families who are unable to provide what teachers feel are appropriate nurturing and learning conditions in the home. Such problems as chemical abuse, primarily in the form of alcohol abuse, high divorce rates, teenage pregnancy and wife abuse are all factors reported by teachers as affecting the learning potential of their students. One of the dramas staged for entertainment by participants at the end of one the workshops focussed on these problems and showed how frustrated teachers feel at times.

#### Time management

Participants may have scored lower on this category after the workshop sessions since much time was devoted to presenting ways of organizing and using their time more effectively. The higher median under Condition I, may result from lack of training in planning and organizational strategies prior to the workshop. Another possible but unlikely explanation is that trainees did less work after they began to implement resource programs in their schools and therefore time management became less of a problem.

#### Intrapersonal conflicts

This category, which emerged as the third highest source

of stress for trainees involved questions surrounding self imposed demands, feelings of inadequacy in terms of job performance, being able to express stress to those placing demands on them and generally viewing teaching as a stressful occupation.

One possible explanation of the higher median (12) under Condition I could be that prior to the workshop participants had not reflectively examined the kinds of stressors they were placing on themselves. The lower medians under Conditions II and III could be a result of opportunities given in the workshop sessions to examine and develop reasonable self expectations. Another possibility, is of course, that trainees realized that they were unable to fulfill all of the demands of implementing a resource teacher program in their schools and did not attempt to do so.

#### Teacher-teacher relations

Teacher-teacher relations emerged as the second lowest stressor on the Wilson Stress Profile. One possible explanation of the low ranking of this sub-section and the decrease in medians in Conditions II and III is that the relationships between these trainees and their colleagues was extremely positive to begin with and became even more positive as they offered resource assistance to fellow teachers' students. On the other hand, it could be explained by what Lortie (1975) calls the egg-crate structure of



schools, where teachers operate in virtual isolation from each other. These results could also reflect that increased involvement and the kinds of negotiation necessary to implement a consultative-collaborative resource model, which the literature suggests are a source of stress to resource teachers, did not take place.

#### Employee-administrator relations

This category emerged, in contradiction to the findings of much of the research literature on teacher-administrator relations, as the lowest source of stress under all three Conditions of the Wilson Stress Profile. A number of explanations are possible. First of all, it may be that these particular trainees had extremely positive working relationships with their administrators. A number of the participants interviewed indicated that this was in fact the case. Others, however, indicated that their administrators were not supportive and in many cases blocked any attempts they made to implement programs in their schools.

A second explanation is also possible. Trinidad and Tobago principals operate under a building management style of leadership. They are reportedly unilateral in their decision making and tend to be less supportive of those teachers who do not support or comply with their directions. A number of participants asked if the Ministry of Education would be seeing the results of this study and expressed concern that their particular responses would be identified.

This fear could have caused them to downplay any conflicts or stressors resulting from their relationships with their administrators.

Why did the medians in this category drop after the trainees had begun implementing their programs? One possibility is that principals were extremely supportive and encouraging. For some of the participants this was in fact true. Others may have gained respect in the eyes of their administrators due to their increased levels of expertise. Another factor could have been that the kinds of strategies and methods of implementation taught in the workshop gave participants increased skill in working with their administrators, thus eliminating previous kinds of conflict. It may be however, that the kinds of increased dialogue and involvement with principals necessary to implement any new program simply did not take place and therefore stress levels did not increase.

#### Hypothesis 5

Secondary trainees will exhibit higher stress levels than elementary trainees as measured by the two post Wilson Stress Profiles.

#### Descriptive analysis

Examination of Figure 4 reveals that secondary trainees exhibited higher stress levels with medians of 103, 95 and 90 under Conditions I-III, than did elementary trainees with medians of 92, 85 and 90.

### Non-parametric analysis

The results of the two subgroups concerned in this hypothesis, secondary trainees and elementary trainees were not compared non-parametrically because no significant difference in stress levels was found in the overall group.

### Discussion of research results of hypothesis 5

On the whole, secondary trainees experienced more difficulties than elementary trainees. This result was anticipated because of the more complex nature of secondary timetabling, the number of teachers involved with each student, the discrepancy between the level at which students may be performing and are actually expected to perform and the multiplicity of subject matter areas they are required to take and master. However, it must be pointed out that only five secondary teachers participated in this study with the remaining 21 subjects working at the elementary level. These results therefore must be seen in light of these numbers and it does not seem appropriate to assume that the results would have been the same had the two groups remained closer in number.

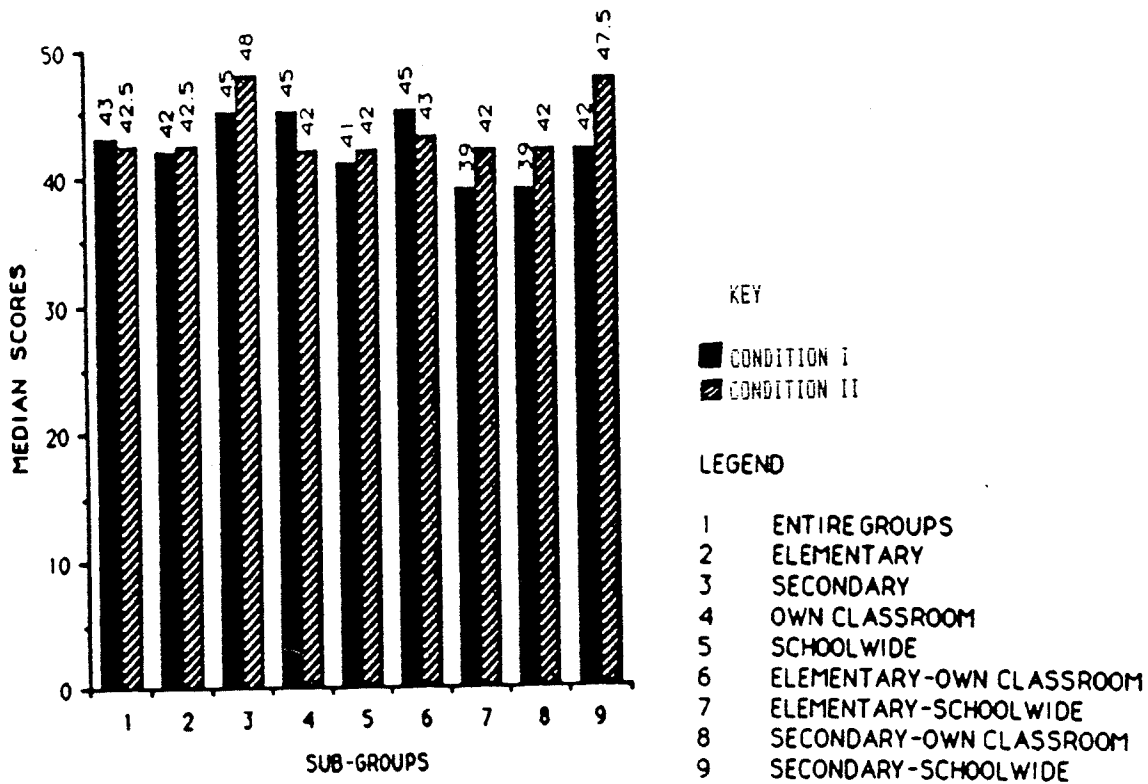
### Hypothesis 6

There will be a positive relationship between the perceived degree of difficulty in implementing resource teacher behaviours as measured by the Resource Teacher Behaviour Scale, and the level, elementary or secondary, at which these behaviours are implemented.

### Descriptive analysis

Figure 8 compares the perceived degree of difficulty experienced by the eight sub-groups in the study.

Figure 8. Resource Teacher Behaviour Scale: Comparison by sub-groups



The following is a ranking from highest to lowest of the degree of difficulty experienced by each of the sub-groups:

1. Entire group		
2. Secondary	- median 48	Condition II
3. Secondary (school-wide)	- median 47.5	Condition II
4. Secondary	- median 45	Condition I
Elementary (own classroom)	- median 45	Condition I
Own classroom	- median 45	Condition I
5. Entire group	- median 43	Condition I
Elementary (own classroom)	- median 43	Condition II
6. Entire group	- median 42.5	Condition II
Elementary	- median 42.5	Condition II
7. Elementary	- median 42	Condition I
School-wide	- median 42	Condition II
Secondary (own classroom)	- median 42	Condition II
Secondary (school-wide)	- median 42	Condition I
Elementary (school-wide)	- median 42	Condition II
Own classroom	- median 42	Condition II
8. School-wide	- median 41	Condition I
9. Elementary (school-wide)	- median 39	Condition I
Secondary (school-wide)	- median 39	Condition I

#### Non-parametric analysis

Since no significant difference was found in the overall group under Conditions I and II of the Resource Teacher Behaviour Scale, the planned statistical tests were not applied to any of the sub-groups.

### Discussion of research findings for Hypothesis 6

It is apparent from Figure 8 that the entire group of secondary trainees and those secondary trainees implementing resource teacher behaviours on a school-wide basis experienced greater perceived degrees of difficulty in implementing resource teacher behaviours than did their elementary counterparts. While this result was anticipated in the study, once again the small number of secondary trainees (5) makes it inappropriate to conclude that this would have been the case had numbers of elementary and secondary trainees been closer.

### Hypothesis 7

There will be a positive relationship between non-job related stress as measured by the Holmes-Rahe Social Readjustment Scale and levels of job related stress as measured by the Wilson Stress Profile.

### Descriptive analysis

Table 4 compares stress levels as measured on both the Wilson Stress Profile (WSP) and the Holmes-Rahe Social Readjustment Scale (HR) over Conditions I-III.

Table 4

Comparison of stress levels as measured by Holmes-Rahe Social Readjustment Scale (HR) and Wilson Stress Profile (WSP)

		HR	WSP
<u>Condition I</u>	Low	24	5
	Moderate	2	19
	High	0	2
<u>Condition II</u>	Low	26	4
	Moderate	0	22
	High	0	0
<u>Condition III</u>	Low	20	4
	Moderate	6	22
	High	1	0

We can see from Table 4 that over Conditions I-III the majority of subjects score consistently within the low range of stress on the Holmes-Rahe Social Re-adjustment Scale. Conversely, the majority of subjects score consistently within the moderate range of stress under Conditions I-III as measured by the Wilson Stress Profile.

#### Non-parametric statistics

Application of the Friedman two-way analysis of variance by ranks to the Holmes-Rahe Social Re-adjustment Scale over



Conditions I-III yielded a probability of .055 assuming chi-square distribution with 2 df (Table 5). Therefore, there was no significant difference in stress levels throughout the study as measured by this instrument.

Table 5

Friedman two-way analysis of variance  
Holmes-Rahe Social Readjustment Rating Scale  
Conditions I-III

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Variable	Rank sum	Xr	<u>df</u>	Probability	Significance
Condition I	62.0	5.79	2	.055	<u>p</u> = > .05
Condition II	46.5				
Condition III	47.5				

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The Friedman two-way analysis of variance by ranks applied to the Wilson Stress Profile (Table 1) as discussed earlier, yielded a p of .066 assuming chi-square distribution of 2 df. Therefore, the null hypothesis was accepted.

#### Discussion of research results for Hypothesis 7

Table 4 reveals that subjects consistently reveal lower stress levels as measured on the Holmes-Rahe Social Re-adjustment Scale which takes into account general life stressors. Subjects score consistently higher on the Wilson Stress Profile, which measures stressors related specifically to teaching functions. This would suggest that the stress levels evidenced on the Wilson Stress Profile are a direct result of job related stress and are little influenced by the general life stressors subjects were experiencing during the time of the study.

## CHAPTER FIVE

### Conclusions and recommendations

This chapter presents an overview of the hypotheses and results, presents conclusions and proposes a number of recommendations for further research.

#### Summary of the hypotheses and results

It was hypothesized that as trainees implemented their programs that the overall stress levels of the entire group would increase, and that there would be a difference in the stress levels of elementary and secondary participants. It was also anticipated that the nature of the overall group's stressors would change throughout the duration of the study. An increase in the perceived degree of difficulty in implementing resource teacher behaviours was also hypothesized and secondary trainees were anticipated to experience greater perceived degrees of difficulty in implementing resource teacher behaviours than would elementary trainees.

The results reveal no significant differences in the stress levels of the overall group of trainees. Neither do they indicate any significant differences in the overall group's perceived degree of difficulty in implementing resource teacher behaviours. Secondary trainees, however, did show both higher stress levels and higher perceived degrees of difficulty in implementing resource teacher behaviours than did the elementary trainees.

Descriptive analysis shows parent-teacher relations, time management and intrapersonal conflicts to be areas of difficulty. Difficulty was also experienced in implementing both diagnostic and consultative-collaborative behaviours. Descriptive analysis also reveals that the amount of stress evidenced by participants did not seem to be a direct result of personal life stressors, but a direct result of job-related events.

### Conclusions

A number of factors, inherent in the nature of the project and its locale, affected the outcome of this study. First of all, the high mortality rate of secondary trainees was not anticipated. In retrospect, it is obvious that a number of factors tied in to the Trinidad and Tobago secondary system, the focus on external exams, the curriculum/content focus of teachers and the lack of built in supports for resource teacher activity, were beyond the control of the researcher. As a result, many of secondary trainees seemed to be unable or unwilling to implement resource teacher behaviours. In addition, the high mortality rate at the secondary level made it impossible to determine whether or not the remaining secondary resource teachers experienced significantly greater stress, differences in stressors, or greater degrees of difficulty in implementing resource teacher behaviours than did their elementary counterparts. While the results suggest that this may in

fact be the case, the difference in numbers between the two groups was so great that such a conclusion is not warranted.

Secondly, it was assumed that the trainees would, for the most part, implement a consultative-collaborative resource model. They did not do so for the following reasons:

1. Only five trainees were released from classroom responsibilities to assume the role of resource teacher within their schools. The rest of the participants were not given release time to work with students and teachers from other classrooms. Because of limited time, most of the participants either worked exclusively with their own students or operated a pull-out model with students scheduled into the resource room.
2. Many trainees identified their resource programs with their resource rooms and preferred to work with small groups of children scheduled into the resource room for remedial help on a regular basis.
3. Administrative supports and accountability, particularly at the secondary level were lacking.
4. Co-tutors were unable to obtain release time to meet with resource teacher trainees and to offer suggestions and on-going in-servicing.
5. The Special Education Unit at the Ministry of Education found it difficult to provide on-going guidance and direction, given their other

extensive responsibilities.

6. Some trainees, because of their perceived "expertise" were assigned entire classes of children with learning difficulties and therefore found, because of their classroom assignments, that it was impossible to extend the resource concept beyond their own classrooms.

Since it was assumed that trainees would implement consultative-collaborative resource models, the instrument used to measure ensuing resource teacher behaviours was subsequently designed with specific consultative-collaborative behaviours in mind. Since the majority of resource programs implemented were pull-out in nature, there was therefore a mis-match between the instrument used to measure resource teacher behaviours and the actual behaviours that were occurring.

It was also assumed that a local project director would be appointed to provide ongoing monitoring and encouragement to all school divisions to provide continual professional development and help implement change (Rampaul, Freeze and McCorkell, 1991). In response to these administrative difficulties, an independent evaluation of the project suggested that an advisory body, mandated to supervise project activities and provide input from all parties involved, would have contributed positively to the success of the project and to the trainees' attempts to implement

their school-based programs (Palmer, 1990). However, no such body existed and trainees were basically left to develop their programs in isolation.

Another mitigating factor in this study is the educational focus on external examinations - the Common Entrance and the CXC. Teachers are bound to a common curriculum guide and such resource behaviours as individualized instruction and small group assistance are consequently more difficult to practice.

There are a number of lessons to be learned from the stumbling blocks encountered in this study. It would seem that secondary teachers, in particular, need support and encouragement to implement changes in the system. The curriculum/content focus versus individualization of programs found in Trinidad and Tobago are also evident in secondary schools in North America. In Manitoba, in particular, implementing resource support at the secondary level, is going to be increasingly difficult with the recent move towards re-implementing departmental examinations.

A positive administrative climate clearly affected the performance of many of the resource trainees in this study. Respect and value for their attempts were shown in concrete terms - time off from classroom responsibilities, space allocated, opportunities to provide professional development for fellow staff members, and provision of materials. When trainees felt that their attempts were not valued or



recognized their enthusiasm waned in the face of large class sizes, limited time and lack of materials. These factors also affect the quality of resource programs, in fact all teaching activities, not only in North America, but throughout the world.

Resource trainees operating in large schools experienced problems specific to large case loads and isolation from fellow staff members. As a result, they ended up engaging in band-aid kinds of remedial activities. Large schools in North America also pose problems of large case load, isolation from staff members and lack of common resource goals among staff. In fact, high case load ranks high on the list of resource teacher stressors. The higher the ratio of resource students, the greater pressure and emotional stress on the teacher (Weiskopf, 1980).

#### Recommendations for further study

The stressors experienced by resource teachers operating in a consultative-collaborative model is an area neglected by researchers. Increasingly, school divisions, particularly in North America, are moving away from self contained classrooms and pull-out models of special education service delivery to a more consultative-collaborative method of service delivery. Existing research on the stressors experienced by resource teachers, however limited it may be, does suggest that resource teachers functioning in consultative-collaborative resource models experience

stressors different from those of regular classroom teachers. The following recommendations are therefore put forth:

1. Studies to identify the specific stressors experienced by resource teachers following consultative-collaborative models of service delivery should be initiated. The training emphasis in the existing program should be re-evaluated.
2. Such studies should examine the stressors and related resource behaviours of both elementary and secondary resource teachers.
3. While quantitative research would provide useful statistical information, qualitative research, using such methods as interviews, observation, and journal keeping on the part of participants, would yield far richer information on the nature of the resource teacher's job, the difficulties and successes encountered in operating a consultative-collaborative model and the nature and degree of the stressors experienced. Far more information was yielded in this study through interviews and school visitations than through the quantitative data collected.

4. A further study with a larger sample, simpler research design and more systematic administrative supports built into the program is recommended. Such a study should be conducted by a Trinidad and Tobago national in order to ensure on site monitoring. Such a study should be simpler in design, using fewer sub-groups. It should also specify and require desired resource teacher behaviours.

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APPENDIX 1

Name \_\_\_\_\_ Date \_\_\_\_\_

School \_\_\_\_\_ District \_\_\_\_\_

**STRESS PROFILE FOR TEACHERS**

**Instructions**

The Wilson Stress Profile for Teachers is designed to help you more clearly define, on a self-scoring basis, the areas and frequency of your stress. As you read each item, evaluate the statement in terms of a period of time rather than a specific day you remember. Indicate how often the source of stress occurs by circling the number that corresponds to the frequency of occurrence. Do not read the stress profile scoring sheet until after you have completed items 1-36.

	Never	Seldom	Sometimes	Often	Very Often
<b>Student Behavior</b>					
1. I have difficulty controlling my class.....	1	2	3	4	5
2. I become impatient/angry when my students do not do what I ask them to do.....	1	2	3	4	5
3. Lack of student motivation to learn affects the progress of my students negatively.....	1	2	3	4	5
4. My students make my job stressful.....	1	2	3	4	5
<b>Total Items 1 - 4</b>	_____				

**Employee/Administrator Relations**

5. I have difficulty in my working relationship with my administrator(s).....	1	2	3	4	5
6. My administrator makes demands of me that I cannot meet.....	1	2	3	4	5
7. I feel I cannot be myself when I am interacting with my administrator.....	1	2	3	4	5
8. I feel my administrator does not approve of the job I do.....	1	2	3	4	5
<b>Total Items 5 - 8</b>	_____				

Stress Profile for Teachers. (C. Wilson. Copyright 1979. Reprinted by permission.)

## Teacher/Teacher Relations

	Never	Seldom	Sometimes	Often	Very Often
9. I feel isolated in my job (and its problems).....	1	2	3	4	5
10. I feel my fellow teachers think I am not doing a good job.....	1	2	3	4	5
11. Disagreements with my fellow teachers are a problem for me.....	1	2	3	4	5
12. I get too little support from the teachers with whom I work.....	1	2	3	4	5

Total Items 9 - 12 \_\_\_\_\_

## Parent/Teacher Relations

13. Parents of my students are a source of concern for me.....	1	2	3	4	5
14. Parent's disinterest in their child's performance at school concerns me.....	1	2	3	4	5
15. I feel my students' parents think I am not doing a satisfactory job of teaching their children.....	1	2	3	4	5
16. The home environment of my students concerns me.....	1	2	3	4	5

Total Items 13 - 16 \_\_\_\_\_

## Time Management

17. I have too much to do and not enough time to do it.....	1	2	3	4	5
18. I have to take work home to complete it.....	1	2	3	4	5
19. I am unable to keep up with correcting papers and other school work.....	1	2	3	4	5
20. I have difficulty organizing my time in order to complete tasks.....	1	2	3	4	5

Total Items 17 - 20 \_\_\_\_\_

## Intrapersonal Conflicts

21. I put self-imposed demands on myself to meet scheduled deadlines.....	1	2	3	4	5
22. I think badly of myself for not meeting the demands of my job.....	1	2	3	4	5
23. I am unable to express my stress to those who place demands on me.....	1	2	3	4	5
24. Teaching is stressful for me.....	1	2	3	4	5

Total Items 21 - 24 \_\_\_\_\_

	Never	Seldom	Sometimes	Often	Very Often
<b>Physical Symptoms of Stress</b>					
25. The frequency I experience one or more of these symptoms is: stomachaches, backaches, elevated blood pressure, stiff necks and shoulders .....	1	2	3	4	5
26. I find my job tires me out .....	1	2	3	4	5
27. I am tense by the end of the day .....	1	2	3	4	5
28. I experience headaches .....	1	2	3	4	5
Total Items 25 - 28 _____					
<b>Psychological/Emotional Symptoms of Stress</b>					
29. I find myself complaining to others .....	1	2	3	4	5
30. I am frustrated and/or feel angry .....	1	2	3	4	5
31. I worry about my job .....	1	2	3	4	5
32. I feel depressed about my job .....	1	2	3	4	5
Total Items 29 - 32 _____					
<b>Stress Management Techniques</b>					
33. I am unable to use an effective method to manage my stress (such as exercise, relaxation techniques, etc.) .....	1	2	3	4	5
34. Stress management techniques would be useful in helping me cope with the demands of my job .....	1	2	3	4	5
35. I am now using one or more of the following to relieve my stress: alcohol, drugs, yelling, blaming, withdrawing, eating, smoking .....	1	2	3	4	5
36. I feel powerless to solve my difficulties .....	1	2	3	4	5
Total Items 33 - 36 _____					

Name \_\_\_\_\_ Date \_\_\_\_\_  
 School \_\_\_\_\_ District \_\_\_\_\_

**SCORING SHEET  
 STRESS PROFILE FOR TEACHERS**

**Instructions for Scoring**

1. After you have completed items 1-36, total the scores in each category and enter it in the corresponding box on this page.
2. Plot your score on the dotted line with an "X" and draw a line between your scoring "X's" so that a clear profile of your stress evaluation is visible.
3. Add up all your category scores and enter the number in the box after Total Overall Score. A score of 36-72 is low, 73-108 is moderate, and 109-180 is high.
4. Check your level on the same line as either low, moderate, or high.

**STRESS PROFILE SCORES**

		Low								Moderate							High				
Score		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Student Behavior	<input type="text"/>																				
Employee/Administrator Relations	<input type="text"/>																				
Teacher/Teacher Relations	<input type="text"/>																				
Parent/Teacher Relations	<input type="text"/>																				
Time Management	<input type="text"/>																				
Intrapersonal Conflicts	<input type="text"/>																				
Physical Symptoms of Stress	<input type="text"/>																				
Psychological/Emotional Symptoms of Stress	<input type="text"/>																				
Stress Management Techniques	<input type="text"/>																				
Total Overall Score	<input type="text"/>	Low _____								Moderate _____							High _____				
		36 - 72								73 - 108							109 - 180				

**Figure 2.2 (Continued)**

Examine each of the following life events in terms of whether or not it applies your life of the past 12 months. If it does assign yourself the mean score on the line to the right. When you have completed the Scale total up your score at the bottom.

<u>Life Event</u>	<u>Mean Value</u>	<u>Your Score</u>
1. Death of spouse	100	_____
2. Divorce	73	_____
3. Marital separation from mate	65	_____
4. Detention in jail or other institution	63	_____
5. Death of a close family member	63	_____
6. Major personal injury or illness	53	_____
7. Marriage	50	_____
8. Being fired at work	47	_____
9. Marital reconciliation with mate	45	_____
10. Retirement from work	45	_____
11. Major change in health/behavior of family member	44	_____
12. Pregnancy	40	_____
13. Sexual difficulties	39	_____
14. Gaining a new family member	39	_____
15. Major business readjustment	39	_____
16. Major change in financial state	38	_____
17. Death of a close friend	37	_____
18. Changing to a different line of work	36	_____
19. Major change in the number of arguments with spouse	35	_____
20. Taking on a mortgage greater than \$10,000	31	_____
21. Foreclosure on a mortgage or loan	30	_____
22. Major change in responsibilities at work	29	_____
23. Son or daughter leaving home	29	_____
24. In-law troubles	29	_____
25. Outstanding personal achievement	28	_____
26. Wife beginning or ceasing work outside the home	26	_____
27. Beginning or ceasing formal schooling	26	_____
28. Major change in living conditions	25	_____
29. Revision of personal habits	24	_____
30. Troubles with the boss	23	_____
31. Major change in working hours or conditions	20	_____
32. Change in residence	20	_____
33. Changing to a new school	20	_____
34. Major change in type and/or amount of recreation	19	_____
35. Major change in church activities	19	_____
36. Major change in social activities	18	_____
37. Taking on a mortgage or loan less than \$10,000	17	_____
38. Major change in sleeping habits	16	_____
39. Major change in number of family get-togethers	15	_____
40. Major change in eating habits	15	_____
41. Vacation	13	_____
42. Christmas	12	_____
43. Minor violations of the law	11	_____
Total score		_____

\* \_\_\_\_\_

Date \_\_\_\_\_

Elementary \_\_\_\_\_  
Secondary \_\_\_\_\_Degree of implementation:  
Own classroom \_\_\_\_\_  
Schoolwide \_\_\_\_\_

## RESOURCE TEACHER BEHAVIOUR SCALE

The Resource Teacher Behaviour Scale is designed to help you more clearly define the areas and frequency of the difficulties you are experiencing in the implementation of the Resource teacher concept in your school. It looks long, but contains only 18 items and should take only ten minutes to complete. As you read each item, evaluate the statement in terms of a period of time rather than a specific occurrence. Circle your answers, using the space provided under each item for any comments you wish to make.

- |   | Not applicable | Never | Seldom | Sometimes | Frequently | Often |
|---|----------------|-------|--------|-----------|------------|-------|
| 1. I find that administering individual diagnostic tests to determine which areas of learning need remediation is a difficult task. | ..... 0        | 1     | 2      | 3         | 4          | 5     |
| 2. I find it difficult to determine the cause of student learning difficulties.   | ..... 0        | 1     | 2      | 3         | 4          | 5     |
| 3. Persuading parents to allow their children to be tested is not easy for me.  | ..... 0        | 1     | 2      | 3         | 4          | 5     |
| 4. I feel that I am unable to use a task analysis approach in all curricular areas.   | ..... 0        | 1     | 2      | 3         | 4          | 5     |



Not applicable  
Never  
Seldom  
Sometimes  
Frequently  
Often

5. I have difficulty understanding curriculum at all levels in my school well enough to suggest modifications or changes in presentation or evaluation. .... 0 1 2 3 4 5

6. Effectively using informal testing techniques for diagnosing student strengths and weaknesses presents difficulties for me. .... 0 1 2 3 4 5

7. I have difficulty translating test results into IEPs. .... 0 1 2 3 4 5

8. Working with parents to devise instructional or behaviour management programs that they can use at home is a source of concern for me .... 0 1 2 3 4 5

9. Analysing work samples to determine error patterns is difficult for me. .... 0 1 2 3 4 5

10. I find it difficult to design alternative instructional procedures to fit a particular child's learning style. .... 0 1 2 3 4 5

11. I find it hard to convince teachers that not all students in their classrooms are able to learn the same things in the same length of time and in the same way. .... 0 1 2 3 4 5

- |  | 0              | 1     | 2      | 3         | 4          | 5     |
|--|----------------|-------|--------|-----------|------------|-------|
|  | Not applicable | Never | Seldom | Sometimes | Frequently | Often |
| 12. Meeting scheduled resource deadlines is difficult for me.  | ..... 0        | 1     | 2      | 3         | 4          | 5     |
| 13. I find it difficult to convince parents that their child needs a modified program  | ..... 0        | 1     | 2      | 3         | 4          | 5     |
| 14. Organizing my time in order to complete tasks is a problem for me.   | ..... 0        | 1     | 2      | 3         | 4          | 5     |
| 15. I find it difficult to keep up with resource related paperwork.  | ..... 0        | 1     | 2      | 3         | 4          | 5     |
| 16. I find that teachers would prefer that I work with students individually rather than helping teachers to make changes within their classrooms to accommodate students' learning needs. | ..... 0        | 1     | 2      | 3         | 4          | 5     |
| 17. I find it difficult to persuade teachers to use compensatory strategies with students who are experiencing learning difficulties.  | ..... 0        | 1     | 2      | 3         | 4          | 5     |
| 18. The way students are timetabled makes it difficult for me to run an effective resource program.  | ..... 0        | 1     | 2      | 3         | 4          | 5     |
| COMMENTS: Please comment on any additional items or concerns that may have been omitted that affect your job as Resource teacher.  | ..... 0        | 1     | 2      | 3         | 4          | 5     |

## APPENDIX 2

## THE RESOURCE TEACHER CONCEPT: AN OVERVIEW

Objectives:

At the end of this session, the workshop participants should be able to:

1. explain to teachers, children, administrators and parents the benefits derived from a resource program.
2. trace the historical development of the resource concept.
3. describe variations in resource formats: differences and commonalities, advantages and disadvantages.
4. explain the place of the resource program in the total organization of the school.

Topic Outline:

1. a rationale for the development of a resource program.
2. an historical perspective on the growth and development of resource programs.
3. a review of variations in resource programs.
4. a consideration of the resource program as a subsystem of the school organization.

References:

- Bachor, D. & Crealock, C. 1986. Instructional Strategies for Students With Special Needs. Scarborough, Ont.: Prentice Hall.
- Harris, W.J. & Schutz, P.N.B. 1986. The Special Education Resource Program: Rationale & Implementation. Columbus.:Merrill.
- Wiederholt, J.L., Hammill, D.D. & Brown, V.L. 1983. The Resource Teacher: A Guide to Effective Practices. 2nd. ed. Newton, Mass.: Allyn & Bacon.

## RESOURCE TEACHER CONCEPT 2

### OBJECTIVES

At the end of session #3 participants should be able to:

1. Outline and explain the role of the resource teacher
2. Outline and explain what basic knowledge, skills and experience a resource teacher should have
3. Describe the referral process and design appropriate forms for use in Trinidad and Tobago

### TOPIC OUTLINE

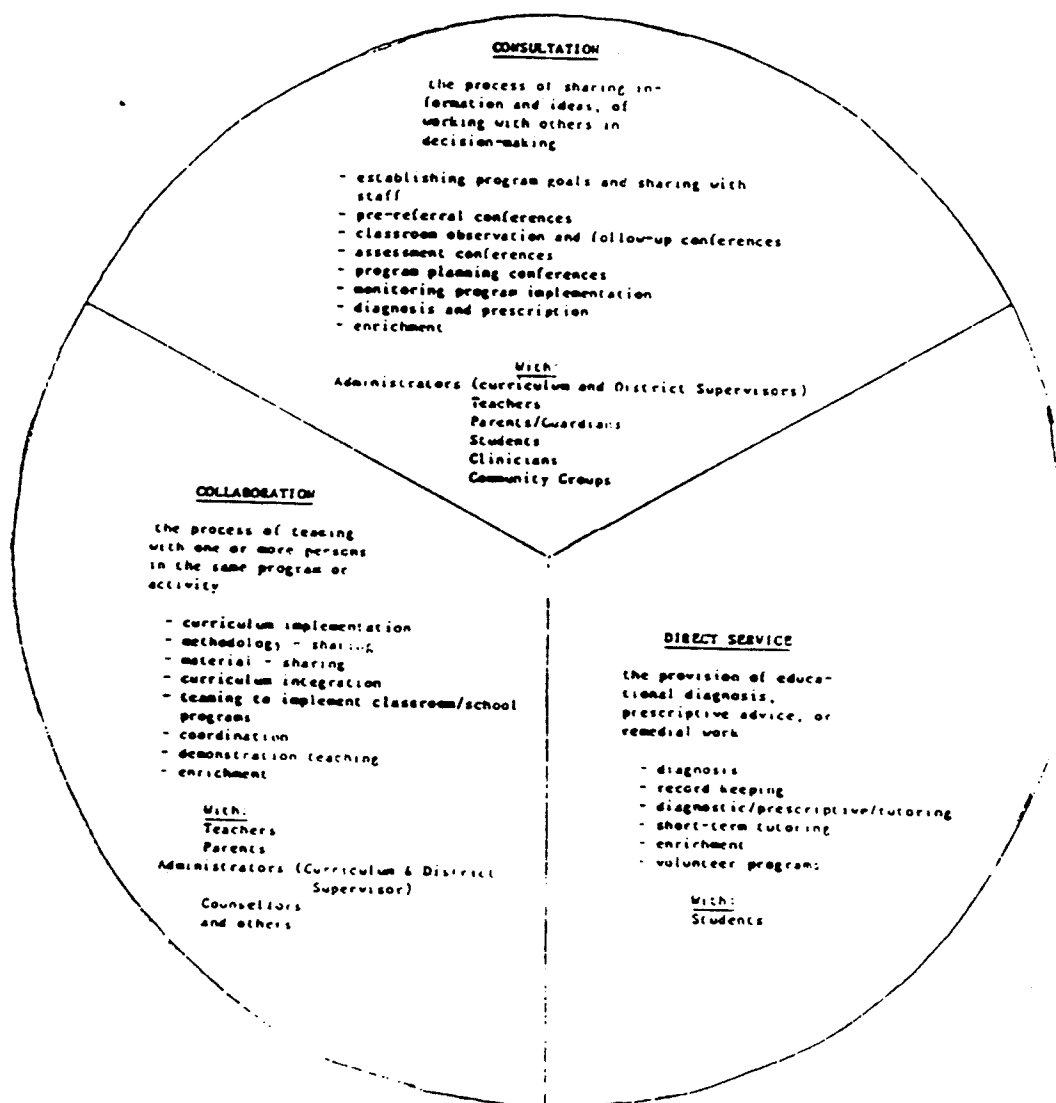
1. **ROLE OF THE RESOURCE TEACHER** (Harris and Schutz, 1986; Weiderholt, Hammill and Brown, 1983)
  - a. Direct service to students
    - i. assessing educational needs
    - ii. diagnostic/prescriptive tutoring
    - iii. short term remediation and/or tutoring
    - iv. enrichment
    - v. volunteer programs
  - b. Consultation
    - i. conferencing
    - ii. preparing and implementing instructional programs
    - iii. consulting with administrators, teachers parents and others regarding educational matters concerning specific children
    - iv. monitoring progress
  - c. Collaboration
    - i. curriculum implementation
    - ii. sharing of methodology
    - iii. sharing of materials
    - iv. coordination
2. **RESOURCE TEACHER COMPETENCIES** ( Harris and Schutz, 1986; Weiderholt, et. al, 1983)
  - a. Personal qualities and experience
  - b. Curriculum analysis
  - c. Organizing and managing the learning environment
  - d. Mobilizing resources
  - e. System analysis

3. THE REFERRAL PROCESS (Bachor and Crealock, 1986; Harris and Schutz, 1986; Weiderholt et. al, 1983)
- Criteria for referrals
  - Methods of referral
  - Designing referral forms

## REFERENCES

- Bachor, D., and Crealock, C. (1986). Instructional strategies for students with special needs. Scarborough, Ontario: Prentice-Hall.
- Harris, W.J., and Schutz, P. (1986). The special education resource program. Columbus, Ohio: Merrill.
- Weiderholt, J.L., Hammill, D., and Brown, V. (1983). The resource teacher. Boston: Allyn and Bacon.

### ROLE OF THE RESOURCE TEACHER



## THE RESOURCE PROGRAM IN THE ELEMENTARY SCHOOL

Wednesday, July 13, 1988

Tuesday, July 12, 1988

Objectives:

At the end of the session, the workshop participants should be able to:

1. describe four organizational models found in elementary resource programs and the factors causing their differences.
2. describe the variations in functions of the resource teacher in three elementary resource models and the strengths and weaknesses of each model.
3. explain the impact of the physical environment, materials and human resources on the elementary resource model.

Topic Outline:

1. differentiation among elementary resource programs:
  - a. target population
  - b. program location
  - c. program function
  - d. instructional orientatiion
2. functions of the elementary resource teacher:
  - a. assessment
  - b. direct instruction
  - c. consultation
  - d. collaboration
  - e. in-service training
3. three elementary resource models:
  - a. resource teacher
  - b. resource consultant
  - c. teacher consultant
4. the physical environment and its impact on the elementary resource program.
5. types of instructional materials appropriate for elementary resource programs.
6. human resources and their influence on the elementary resource program.

## SECONDARY RESOURCE PROGRAMS

### OBJECTIVES

At the end of sessions #4-#6 secondary participants will be able to:

1. Identify the differences between elementary and secondary resource programs
2. Describe adolescent needs and explain how they impact on approaches to secondary school programming
3. Explain service alternatives for exceptional students at the secondary level
4. Describe and outline three major thrusts/approaches to intervention for special needs students at the secondary level: academic, vocational and life skills
5. Outline the procedures required to organize and manage a resource program

### TOPIC OUTLINE

1. Differences between elementary and secondary resource programs (Bachor and Crealock, 1986; Harris and Schutz, 1986; Weiderholt et. al, 1983)
  - a. Organization and structure
  - b. Training of regular educators
  - c. Training of resource teachers
  - d. Nature of adolescents
2. Adolescent needs and their impact on programming at the secondary level (Harris and Schutz, 1986; Newman and Newman, 1986; Lloyd, 1985; McCorkell and Bilinski, 1987; Smith and Payne, 1980)
  - a. Holistic view of adolescent needs - emotional, spiritual, intellectual and physical
  - b. Developmental tasks of adolescence
  - c. Characteristics of adolescents with learning difficulties
  - d. Goals for adolescents with learning difficulties
3. Service models at the secondary level (Bachor and Crealock, 1986)
  - a. Regular classroom
  - b. Regular classroom/IEP
  - c. Regular classroom/IEP plus support
  - d. Resource room/IEP with direct service
  - e. Self contained class with some integration
  - f. Clinical placement

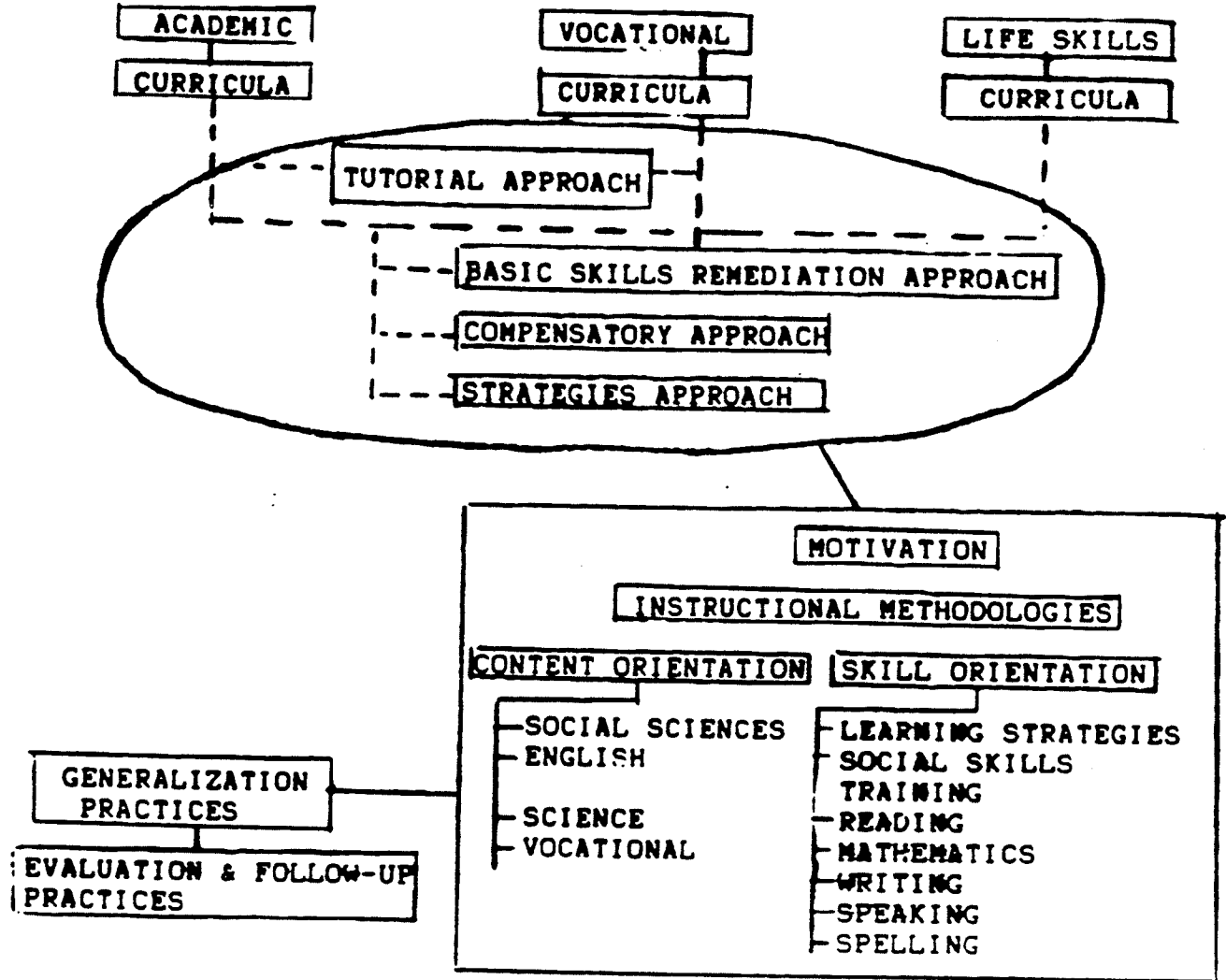
4. Three major thrusts/approaches to intervention at the secondary level (Masters and Mori, 1986)
  - a. Academic
  - b. Vocational
  - c. Lifeskills
  
5. Organizing and managing a resource program (Harris and Schutz, 1986; Weiderholt et. al, 1983)
  - a. Preparing staff and parents
  - b. Resource room program within the school organization
  - c. Organization of space, materials and human resources

#### REFERENCES

- Bachor, D., and Crealock, C. (1986). Instructional strategies for students with special needs. Scarborough, Ontario: Prentice-Hall.
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**PROGRAM THRUSTS AND APPROACHES TO INTERVENTION  
AT THE SECONDARY LEVEL  
(Masters and Mori, 1986)**



**ASSESSMENT IN THE ELEMENTARY RESOURCE PROGRAM****Specific Tools and Techniques**

Monday, July 18, Wednesday, July 20, 1988

Objectives:

At the end of these sessions participants will:

1. have become familiar with a variety of formal and informal testing instruments.
2. have received information on a variety of techniques for assessing student performance and progress.
3. have the prerequisite knowledge required to use the information obtained through testing and observation to prescribe and remediate.

Topic Outline:

1. test selection:
  - a. formal (norm referenced, criterion referenced)
  - b. informal (inventories, checklists, observation, interviews)
2. examination and critiquing of elementary assessment instruments:
  - a. Bader Reading and Language Inventory (Bader, 1983).
  - b. Brigance Diagnostic Inventory for Early Childhood (Brigance 1981).
  - c. Diagnostic Spelling Test (Kottmayer, 1970).
  - d. KeyMath Diagnostic Arithmetic Test (Connolly, Nachtman, and Pritchett, 1976).
  - e. Peabody Picture Vocabulary Test (Dunn and Dunn, 1981).
  - f. Test of Language Development (Newcomer and Hammill, 1977).
  - g. teacher designed assessment (Mayer, 1987).
  - n. variety of checklists and inventories for language, mathematics, reading and perceptual assessment.

Assessment References and Materials

Bachor, D., and Crealock, C. 1986. Instructional Strategies for Students with Special Needs. Scarborough, Ont.: Prentice Hall.

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## SECONDARY ASSESSMENT

### OBJECTIVES

By the end of sessions #19, #20, and #25 secondary participants will:

1. Have reviewed the decision-making/assessment model
2. Have become familiar with a variety of formal testing instruments
3. Be able to use a variety of informal techniques for diagnosing student performance and assessing student progress
4. Have reviewed the diagnostic/prescriptive principles of mastery learning
5. Have the prerequisite knowledge to use diagnostic information to develop instructional strategies and programs

### TOPIC OUTLINE

1. Review of decision-making/assessment model (Bachor and Crealock, 1986; Harris and Schutz, 1986)
2. Formal Assessment
  - a. Peabody Achievement Test (Dunn and Markward, 1970)
  - b. Test of Adolescent Language (Hammill, Brown, Larsen and Weiderholt, 1980)
  - c. Test of Written Language (Larsen and Hammill, 1983)
  - d. Test of Written Spelling (Larsen and Hammill, 1976)
  - e. Test of Reading Comprehension (Brown, Hammill and Weiderholt, 1978)
3. Informal assessment
  - a. Bader Reading and Language Inventory (Bader, 1983)
  - b. Brigance Diagnostic Inventory of Essential Skills (Brigance, 1981)
  - c. variety of checklists and inventories for language, mathematics, reading and perceptual assessment
  - d. observation
  - e. interview
  - f. work samples
  - g. teacher designed assessment
4. Mastery learning
  - a. Bloom's model
  - b. task analysis approach to assessment

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- Bader, L. (1983). Bader reading and language inventory. New York: MacMillan.
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- Dunn, L., and Marward, F. (1970). Peabody individual achievement Test. Circle Pines, MN: American Guidance Services.
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## INSTRUCTION IN THE RESOURCE PROGRAM: AN OVERVIEW

### Objectives:

At the end of this session, participants will be able to:

1. state the difference between regular classroom teaching and resource teaching.
2. discuss the role of the Individualized Educational Plan (IEP) as a process and as a product.
3. state the qualities of a good IEP.
4. have the prerequisite knowledge required to develop an IEP form for indigenous use.
5. describe the role of the resource teacher with respect to instructional support in language arts and mathematics.

### Topic Outline:

1. the role of the resource program in academic instruction.
2. the Decision Making Model applied to instruction.
3. the role of the IEP in the resource program:
  - a. the IEP as a process.
  - b. the IEP as a product.
4. the resource teacher's role in the selection of instructional strategies/materials for language arts and mathematics.

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- Wiederholt, J.L., Hammill, D.D. & Brown, V.L. 1983. The Resource Teacher: A Guide to Effective Practices. 2nd. ed. Newton, Mass.: Allyn & Bacon.



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INDIVIDUALIZED EDUCATION PROGRAM

Student: Marcus Field D.O.B.: 5/1/XX Age: 8 Grade: 3  
 Teacher: Mrs. Paula Gagnon School: Harold Elementary District: 42  
 Parents: Mr. and Mrs. William Field Address: 12 Manor Rd., Blissville  
 Phone: 623-4353

Reason for referral and referral source (summary):

Marcus was referred by his teacher, Mrs. Gagnon, because of academic problems in reading and spelling and difficulties with letter formation, size, and spacing on lined paper.

Present Levels of Educational Functioning  
 Summary of Assessment Results

Test/Procedure	Date	Examiner	Summary of results
Wechsler Intelligence Scale for Children Revised (WISC-R)	10/10/XX	Dr. H. Sanders, Psychologist	IQ 110
Peabody Individual Achievement Test (PIAT)	10/12/XX	Melanie Bowers, Resource room teacher	Below avg. performance in reading recognition, reading comprehension, and spelling. Avg. performance in math and general information
Developmental Test of Visual-Motor Integration (VMI)	10/12/XX	Bowers	VMI age equivalent: 6-2 (1-8 year delay in development)
Gray Oral Reading Test (GORT)	10/12/XX	Bowers	Oral reading 2.1 Comprehension 2.0 Listening capacity 3.0
Woodcock Reading Mastery Tests	10/13/XX	Bowers	Independent level 1.3 Instructional level 1.8 Frustration level 2.3
Classroom observation (open-anecdotal)	10/8/XX	Bowers	Reading and math sessions were observed. Marcus was struggling to keep up with the reading and math groups. He also was experiencing difficulty in remaining on task during seat work.

Summary of strengths

Visual and auditory acuity are normal.  
 Enjoys art.  
 Is polite to adults.  
 Enjoys helping.  
 Does well in math in one-to-one situations.  
 Is motivated in social studies and science.  
 Acts very involved in group discussions.  
 Average intelligence and performance in general information.  
 Gross and fine motor tasks are performed well separately.

Summary of weaknesses

Limited skills in reading and spelling.  
 Immature formation of letters and improper spacing.  
 Difficulties in memory and visual perception.  
 Unable to perform well with independent work tasks.  
 Needs concrete, manipulative materials in math.  
 Has difficulty in visual-motor integration.



## Evaluating the IEP for Internal Consistency

The format of the IEP provides a logical, step-by-step outline for designing an educational program for a handicapped student. The planning process is developmental, proceeding systematically from specification of the student's present levels of functioning to the generation of annual goals and short-term objectives. Nevertheless, problems exist in the writing of IEPs.

Fig. 10-5 IEP checklist.

IEP CHECKLIST		<u>Yes</u>	<u>No</u>
<b>Presence of essential IEP components:</b>			
1.	Present levels statement.	—	—
2.	Annual goals.	—	—
3.	Short-term objectives.	—	—
4.	Description of special education and related services.	—	—
5.	Projected dates of initiation and duration.	—	—
6.	Objective criteria and schedule of evaluation.	—	—
<b>Elements of internal consistency:</b>			
1.	Does the present levels statement reflect an assessment plan related to the initial reason for referral?	—	—
2.	Are annual goals based on needs that have been documented with assessment data?	—	—
3.	Are short-term objectives logically derived from annual goals?	—	—
4.	Does each short-term objective contain behavioral descriptions, conditions, and criteria for evaluation?	—	—
5.	Can the annual goals and short-term objectives be accomplished in the special education and related services described?	—	—
6.	Are the special education and related services described "least restrictive"?	—	—
7.	Do the projected dates of initiation and duration of special education and related services suggest a smooth transition from the present program?	—	—
8.	Do the evaluation activities of each activity support the projected date of completion of each annual goal?	—	—

INDIVIDUAL INSTRUCTIONAL PLAN

Annual goal: To read accurately, with adequate comprehension to the third-grade level with 90 percent accuracy.

Date: XX/X/XX

Instructional objectives	Methods and materials	Teacher	Evaluation procedure	Start of instruction	Date objective achieved
<p>After reading paragraphs written at the 2.0, 2.5, and 3.0 grade levels, Marcus will answer literal comprehension questions with 90 percent accuracy.</p>	<p>Introduce and drill words from the paragraphs in isolation and in context using:</p> <ul style="list-style-type: none"> <li>• Basal reading series;</li> <li>• Supplementary series;</li> <li>• Teacher-made worksheets;</li> <li>• Educational games;</li> <li>• A multisensory approach.</li> </ul>	<p>Bowers</p>	<p>Measure progress and graph right answers weekly on a chart. Answer five comprehension questions orally and ten in writing (including detail, main idea, sequence, and drawing conclusion).</p>	<p>Nov. 15</p>	

**SECONDARY INSTRUCTION**  
**Written Expression**

**OBJECTIVES**

At the end of sessions #25 and #27, secondary participants will:

1. Be able to describe the stages in the development of language skills
2. Have received an overview of writing characteristics of adolescents with learning difficulties
3. Be familiar with methods of integrating writing across the curriculum
4. Have been given strategies for developing positive attitudes towards writing
5. Be able to develop instructional procedures for written expression within the regular classroom setting
6. Be able to describe the various stages in the writing process and to explain the importance of each
7. Be familiar with writing strategies to build sentences and paragraphs
8. Have examined a variety of instructional materials in the area of basic skills

**TOPIC OUTLINE**

1. Stages in the development of language skills (Alley and Deshler, 1979)
  - a. Experience
  - b. Listening
  - c. Speaking
  - d. Reading
  - e. Writing
  - f. Refinement of language usage
2. Writing characteristics of adolescents with learning difficulties (Alley and Deshler, 1979)
  - a. attitude
  - b. content
  - c. craft
3. Integrating writing across the curriculum (Weiderholt, Hammill and Brown, 1983)

4. Developing positive attitudes towards writing (Alley and Deshler, 1979)
5. Instructional procedures for written expression (Weiderholt et. al, 1983)
  - a. creating an environment for writing
  - b. purpose
  - c. standards
  - d. audience
  - e. group story/essay writing
  - f. fluency
6. The writing process
  - a. pre-writing activities
  - b. writing
  - c. editing
  - d. publication
7. Building sentences and paragraphs (Alley and Deshler, 1979; Bachor and Crealock, 1986; Weiderholt et. al, 1983)
  - a. directed writing
  - b. sentence strategies
  - c. sentence combining
  - d. Kerrigan's integrated model of composition
8. Examination of instructional materials

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INSTRUCTION IN THE ELEMENTARY RESOURCE PROGRAM  
Wednesday, July 20, 1988

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Objectives:

At the end of this session participants will :

1. be able to describe the qualities of a variety of remedial instructional strategies in the areas of language arts and mathematics.
2. have received information on a variety of instructional materials in the areas of language arts and mathematics.

Topic Outline:

1. procedures for the selection of strategies/materials related to elementary students' individual needs as revealed through the assessment process.
2. specific instructional strategies/materials related to individual needs in language arts and mathematics:
  - a. academic remediation.
  - b. tutorial services (remedial/curricular support).
  - c. in-class accommodation & compensatory support.

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