Mainstreaming secondary students with intellectual disabilities into regular classrooms: An investigation of the perceived training needs of classroom teachers

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ABSTRACT

The New Zealand education system, like that of other countries, is currently committed to increasing the level to which students with disabilities are integrated into regular classrooms. This policy of "mainstreaming" brings regular classroom teachers increasingly in contact with students with special educational needs. Pre-service training may not have prepared classroom teachers to work with mainstreamed students. In-service training has been advocated as an effective way to address this lack of skills. The thesis uses two research methods to investigate the training needs regular classroom teachers feel they have in order to prepare them for mainstreaming. A questionnaire survey was conducted requiring secondary school teachers to indicate their training priorities for mainstreaming. A case study was conducted using progressive interviews to focus on the experiences of nine secondary school teachers during their first year of mainstreaming and particularly on changes in their perceived training needs. Results show that relatively few teachers have received training for mainstreaming, although the majority of teachers surveyed feel such training is important. Training needs were seen to fall into three main categories. Those associated with classroom management were rated as most important, followed by training areas associated with addressing individual needs. Training in theoretical issues was seen as least important. The perceived training needs of the teachers in the case study changed during the course of the year. Initially, training needs associated with classroom management and those associated with meeting individual needs were given equal priority. By the end of the year teachers' focus was on training to address the individual needs of mainstreamed students. The implications of these results on the design and delivery of in-service training activities related to mainstreaming is discussed. Teachers in the case study also raised other issues and concerns which affected the quality of the mainstream placement. In particular the concerns were related to inadequate information about the individual needs and goals of mainstreamed students and their Individualised Educational Programmes.

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CHAPTER 1: INTRODUCTION AND RATIONALE

Students with special educational needs have traditionally received education in settings separate from their non-disabled peers. Changes in social attitudes to people with disabilities have been reflected in changes in special education. Integration of disabled students into the mainstream education system has increased over the past three decades.

The UK 1944 Education Act defines "special educational treatment" as "education by special methods appropriate for pupils suffering from disability of mind or body " (Section 8.2.c.). This definition illustrates the medical model of disability, which assumes that disability, like disease, is due to a physiological dysfunction caused by the presence of a pathology (Deno, 1970). Within education, adherence to the medical model has led to the assumption that children with special educational needs, being fundamentally different from other children, should be taught in a fundamentally different way, and in a different teaching/learning environment from that of the 'normal' child's 'normal' school. Consequently, special educational provisions developed to provide an education which would cater for these disabled children's needs.

> At the heart of the special approach is the presumption that students with learning problems cannot be effectively taught in regular education programs even with a variety of support. Students need to be "pulled-out" into special settings where they can receive remedial support. (Will, 1986, p. 412).

One influential concept arising from the focus placed on the rights of disabled people during the 1960s and 1970s was that of "normalisation". The Normalisation Principle "means making available to all mentally retarded people patterns of life and conditions of everyday living which are as close as possible to the regular circumstances and ways of life of society" (Nirje, 1976, p. 231). The normalisation approach advocates that society should not regard people with disabilities as fundamentally different, but rather should consider which aspects of disabled people's environment and upbringing present barriers to their full participation in normal society. This kind of approach has been described as adopting a "social construction" model of disability (Oliver, 1988), which proposes that a society disables individuals with impairments by the way that society responds to those impairments. Approaches such as that of Oliver (1988) and Sleeter (1986) challenge the assumptions of the medical model of disability and suggest

that it has been the insistence on treating children with disabilities as different which has perpetuated the myth of their differentness. Oliver (1988) and Sleeter (1986) reverse the syllogism inherent within the medical model of disability; since these children are treated differently, they cannot help but appear different.

Increased understanding of the political aspects of separate special education helped focus attention on the negative effects of segregated programmes (Deno, 1970; Dunn, 1968; Lilly, 1970). Labelling theorists (e.g., Lemert, 1951) describe the negative effects of labelling in terms of proscribing the predicted limits of an individual's achievements. Labelling theory predicts that the expectations engendered by labels alter the way others interact with the labelled individual. The stigmatisation created by the labelling process then affects the self-image of the individual and their consequent behaviour. Research indicates that students with disabilities in segregated settings lose self-esteem and the motivation to succeed (Strain & Kerr, 1981), whereas students with disabilities integrated into regular classes usually show gains in self-concept (Gottlieb, 1981).

Research suggesting that "pull-out" programmes make little or no difference to the achievements of students with special needs (e.g., Jenkinson, 1987; Semmel, Gottlieb & Robinson, 1979; Semmel, Lieber & Peck, 1986; Strain & Kerr, 1981) contributed to the growing disillusionment with "pull-out" programmes and segregated special education. This led to calls for radical changes in the nature of special education and its delivery, particularly with respect to exclusion policies for students with special educational needs (e.g., Dunn, 1968; Reynolds, Wang & Walberg, 1987; Stainback & Stainback, 1984).

In the United States of America, the rights of children with special educational needs to receive their education in the least restrictive environment and to have access to appropriate special support and tuition to assist them to maximise their potential were mandated by Public Law 94-142 The Education for All Handicapped Children Act, enacted in 1975. P.L. 94-142 mandates that all children have the right to attend their local school, this being seen as the most 'normal' or least restrictive environment.

Overseas reports and legislation have had significant effects on the development of education in New Zealand, (Mitchell, 1987), and many of the principles of P.L. 94-142 have influenced Government policy and the policies and practices of voluntary organisations and professional agencies in New Zealand.

Policies and practices of teaching students with special educational needs in regular classrooms alongside their non-disabled peers are referred to by a number of terms, such as "mainstreaming", "integration" and "inclusion". In New Zealand the term integration is not widely used in this context because of potential confusion with another process termed integration, that of the partial incorporation of private schools into the state system (Mitchell & Mitchell, 1987). The terms "inclusion" and, particularly, "full inclusion" are often understood to represent an extreme form of mainstreaming, since they are frequently used by authors who reject any withdrawal from or alternative to mainstream classes as morally indefensible (e.g., Pearpoint & Forest, 1993) and who propose a system where exceptional children spend 100% of their time at school in regular classes, (e.g., O'Brien & Forest, 1992). In the interest of clarity the term "mainstreaming" will be used throughout this report.

Mitchell and Mitchell (1987) describe mainstreaming as concerning "the process of educating exceptional children in settings where they have the maximum association, consistent with their interests, with other children" (p. 107). Cole and Chan (1990) state that

> mainstreaming involves the assignment of students with disabilities from segregated settings into classes in local schools, ... the retention of students with disabilities in regular schools and the rejection of policies that encourage the relegation of these students to segregated settings. But the concept implies more than the physical placement of these students into regular school (p. 27).

A number of definitions of mainstreaming refer to issues concerning not only the physical setting of the regular classroom, but also the nature and quality of the education delivered to the exceptional child. For example, mainstreaming has been defined as

> enrolling and teaching exceptional children in regular classes for the majority of the school day under the charge of the regular class teacher, and assuring that the exceptional child receives special education of high quality to the extent that it is needed during that time and at any other time that it is needed (Birch, 1978, p. 1).

Similarly, Kaufman, Gottlieb, Agard and Kukic (1975) propose that "mainstreaming refers to the temporal, instructional, and social integration of eligible exceptional children with normal peers based on an ongoing, individually determined, educational planning and program process" (p. 4). In this way, mainstreaming is seen as

more than simply placement of a student with special needs into a regular classroom, but also concerns the delivery of appropriate, high quality instruction within the classroom setting.

When students with special educational needs are placed in regular classrooms, it is important that their individual needs are acknowledged and addressed. If measures are not taken to recognise and meet students' individual needs, then mainstreaming may become little more than the token reintroduction of students with disabilities to an education system which has demonstrably failed to meet their needs in the past (Brown, Schwartz, Udvari-Solner, Kampschroer, Johnson, Jorgensen & Gruenewald, 1991). The purpose of mainstreaming is to provide all, or as many as possible, students with appropriate, quality education within a regular education setting "and that goal is not achieved by some false image of homogeneity in the name of inclusion....The alternative to segregation is not dumping students in heterogenous groups and ignoring individual differences" (Stainback, Stainback, East & Shevin, 1994, p. 487).

Rationale

Mainstreaming introduces exceptional children into regular classroom environments. One effect of mainstreaming is to introduce classroom teachers to situations which place a new set of demands upon their teaching skills (Lyon & Ognibene, 1982). Research has shown that classroom teachers frequently approach mainstreaming with anxiety (e.g., Jenkins & Leicester, 1992) and uncertainty about their ability to effectively teach mainstreamed students with special needs (e.g., Larrivee, 1981). Authors in New Zealand (e.g., Mitchell, 1984) and in the United States (e.g., Lyon & Ognibene, 1982) have argued that classroom teachers require training to prepare them to meet the new demands that mainstreaming puts on their teaching skills. For those teachers currently in practice, in-service training has been advocated as the best means to address these training needs (e.g., Zigmond, Levin & Laurie, 1985) and research has shown that in-service training can be effective to this end (e.g., Brady, Swank, Taylor & Freiberg, 1988).

Classroom teachers are selective about the strategies they choose to use with students who have special needs (e.g., Whinnery, Fuchs & Fuchs, 1991) and authors (e.g., Mann, 1981) stress the importance of tailoring in-service activities to the needs of teachers. Teachers have limited time and resources to devote to in-service training and it

is therefore important that any in-service activities offered appear valuable to them. Teachers attribute greatest value to in-service activities which they feel have personal relevance to them (Holly, 1982). One way to ensure that in-service training activities are perceived as valuable by teachers is to ask teachers which areas of training they see as most relevant and useful. This thesis reports on a study which uses two research methodologies to investigate the perceived training needs of secondary school teachers with respect to mainstreaming. One proposed outcome of the study will be to provide suggestions as to the nature and content of in-service activities which might be valuable to teachers.

The study presented a questionnaire to a large number of teachers to investigate their opinions regarding their training priorities for mainstreaming. A number of studies have employed questionnaire surveys to provide information about teacher perception of and attitude toward mainstreaming (Coates, 1989; Larrivee & Cook, 1979; Semmel, Abernathy, Butera & Lesar, 1991; Zigmond, Levin & Laurie, 1985). The overall pattern of training priorities of a large group of teachers tends to remain constant, however the priorities of many individual teachers change over time (Marshall, Maschek & Caldwell, 1982). Progressive interviews have been employed as a technique to investigate teachers' mainstreaming experiences and the development of their attitudes and beliefs over time (e.g., Giangreco, Dennis, Cloninger, Edelman & Schattman, 1993). Teachers are not always successful in predicting which areas of their teaching will prove successful in mainstreaming situations and experience of mainstreaming can alter their perceived training needs (Jenkins & Leicester, 1992). A case study approach was chosen to supplement the quantitative data provided by the questionnaire survey. A number of teachers were interviewed during their first year of mainstreaming with a focus on on-going changes of perceived need.

This study concentrates on the training needs of secondary school teachers in order to examine factors which may jeopardise the success of the mainstreaming process in secondary schools. Aspects of secondary school organisation demand levels of autonomy from students which those with special needs may find hard or impossible to meet (Schumaker & Deshler, 1988). Furthermore, the inclusion of mainstreamed students markedly widens the range of student ability in a class and secondary school teachers are unlikely to be trained to deliver curricula to classes covering such an ability range

(Hegarty, Pocklington & Lucas, 1981). While these factors do not preclude successful mainstreaming in secondary schools they can make the mainstreaming process more difficult than in primary settings. One significant aspect of in-service training for secondary teachers may be to make them aware of these particular difficulties and to suggest strategies to address them.

CHAPTER 2: REVIEW OF LITERATURE

Are Regular Classroom Teachers Prepared for Mainstreaming?

There is currently some controversy over the success, efficacy and rationale of the practice of mainstreaming (see Wiederholt, 1989, for review). There is little doubt that "the implementation of mainstreaming has introduced regular classroom teachers to concepts, procedures and types of students with which they were somewhat unfamiliar" (Lyon & Ognibene, 1982, p. 1). These authors cite a survey (Anderson et al, 1978) in which only 15% of teachers indicated they believed they had the skills necessary to help exceptional students in their classroom. Other authors have argued that regular classroom teachers are not adequately prepared to provide quality education for students with special educational needs in their mainstream classrooms (Chapman, 1992; Gear & Gable, 1979; Kearney & Durand, 1992; Kauffman, Gerber & Semmel, 1988; National Joint Committee on Learning Disabilities, 1993; Schultz, 1982). This position is supported by evidence gathered using a variety of research methodologies. Two observation studies indicated that teachers behave differently towards students with learning difficulties, initiating more contact of a negative, non-supportive kind (Siperstein & Goding, 1985) and that they doubt their abilities to work with special needs students (Larrivee, 1981). In response to a questionnaire survey teachers reported that they do not perceive themselves to have the skills to adapt instruction (Semmel, Abernathy, Butera & Lesar, 1991). Zigmond, Levin and Laurie (1985) employed both questionnaire and interview techniques. They found that secondary school teachers expect learning disabled students to underachieve and be a burden in the classroom, but that these teachers do little extra planning and do not implement different instruction in order to cater for their needs. In initial interviews primary school teachers expressed doubts about their abilities to plan interventions for students with special needs in their classes. Follow-up interviews showed that they either do not carry intervention plans through or experience considerable difficulty in implementing them (Jenkins & Leicester, 1992).

Even when teachers have the necessary skills, it is not always certain they will develop the positive attitudes required to make mainstreaming effective. Kauffman, Gerber and Semmel (1988) dispute certain "arguable assumptions" (p. 6), which they see as underlying the Regular Education Initiative, a mainstreaming initiative introduced in the United States (Will, 1986). One such assumption challenged by Kauffman and

colleagues is the notion that "regular classroom teachers will increasingly welcome more difficult-to-teach students in their classrooms" (p. 8). Many teachers recognise the right of students with special needs to receive education in the regular classroom, but teachers are not always enthusiastic about receiving problem learners into their own mainstream classes (Zigmond, Levin & Laurie, 1985). Research indicates that teachers a) are concerned about their lack of skills in dealing with the exceptional students in their classes (Lyon & Ognibene, 1982); b) do not feel mainstreaming will improve the education of mainstreamed students (Coates, 1989); c) do not feel they are equipped to provide education to mainstreamed students (Semmel, Abernathy, Butera & Lesar, 1991) and d) typically approach the inclusion of students with special needs in their classes with fear, caution and anxiety (Giangreco, Dennis, Cloninger, Edelman & Schattman, 1993). However, teachers who have had previous success with students with special needs are more likely to have a positive attitude toward mainstreaming (Larrivee & Cook, 1979).

Training to Prepare Regular Classroom Teachers for Mainstreaming.

The need to provide regular education teachers with training to equip them to meet the demands that mainstreaming puts upon their teaching skills has been emphasised many times in the United States (e.g., Leyser & Abrams, 1986; Lyon & Ognibene, 1982; Wiederholt, 1989) and in New Zealand (e.g., Capie, 1987; Department of Social Welfare, 1983; Hornby & Murray, 1987; Mitchell, 1984; Panckhurst, Panckhurst & Elkins, 1987). Education for the 21st Century: A Discussion Document, (Ministry of Education, 1993), states "Whether teachers are teaching in special or in regular education, they must have the skills and confidence to cater for the broad range of students they will encounter" (p. 36).

Despite repeated calls for teacher education to reflect the need for teachers in regular education to be equipped with the skills to deal with exceptional children, teachers are not being adequately prepared for mainstreaming in the United States, (Kearney & Durand, 1992) or in New Zealand, (Capie, 1987; Chapman, 1992; Hornby & Murray, 1987). Pre-service training for mainstreaming may have little impact on the teacher trainee, since the school system and the teacher education system are highly (and arbitrarily) compartmentalised on the basis of age and ability, and teacher trainees "often selectively attend to only those populations of students that they perceive themselves prepared to teach" (Mann, 1981, p.64). Moreover, changes in pre-service education are

clearly insufficient to meet changing skill requirements for regular education teachers who are presently in service.

To address such shortcomings in teacher training, some authors have called for in-service training to be made available to regular education teachers currently in practice to equip them to teach students with special educational needs in mainstream settings (Department of Social Welfare, 1983; Lyon & Ognibene, 1982; Mann, 1981; Wiederholt, 1989; Zigmond, Levin & Laurie, 1985;). "As the not so subtle title of a recent article suggests 'In-Service Education (is the) Key to P.L. 94-142's Service to Handicapped Children and Youth' " (Lyon & Ognibene, 1982, p. 3). Panckhurst, Panckhurst and Elkins (1987) in their New Zealand survey found that adequate in-service training was rated as desirable by 90% of their respondents.

Mainstreaming in New Zealand.

Until 1989, New Zealand educational statutes did not include direct reference to children with disabilities. "The Education Act 1964 does not even require the state to provide an appropriate education for exceptional children, let alone specify that such children should be educated alongside their non-handicapped peers" (Mitchell & Mitchell, 1987, p. 108). However, despite the lack of statutory obligation, there has been an intent and willingness on the part of many of those involved in the New Zealand education system to include all students within the regular school system wherever possible (Milne & Brown, 1987; Mitchell & Mitchell, 1987). Mitchell and Mitchell (1987) cite indicators of this willingness such as a) the Department of Education's approval of innovative experimental programmes involving the integration of children with special needs, b) the establishment of 'satellite classes' for children with intellectual disabilities in regular schools, c) the creation of units attached to regular schools to cater for physically disabled children, and d) the Department's statement to the OECD Examiners in 1982 which proposed that "Wherever possible, and appropriate to their (children with special educational needs) education and welfare, this education should take place in the normal school setting in the company of their peers" (Department of Education, 1983, cited in Mitchell & Mitchell, 1987, p. 109).

The Department of Education's policy for mainstreaming was first proposed in the Draft Review of Special Education (Department of Education, 1987) and outlined in the Education Gazette of 2 May 1988. In the Education Gazette, mainstreaming is described

as an educational practice, "not an end of itself ... Its purpose is to ensure that, whenever it is appropriate and practicable, all learners should have the right to be educated in their local schools or in educational facilities with their peers" (p. 29). The article further states

> The principal objective of the policy of mainstreaming is to cater for the educational needs of all young people with handicaps within regular school settings ... Some will spend all their time in mainstream classes ... some will spend some of their time there (p. 29).

The article explains that there is no assumption that all students with disabilities will be placed in regular classes, but the Department of Education's commitment to increase the level of mainstreaming in New Zealand schools is explicit. The rights of students with special educational needs to enrol and receive education at state schools in New Zealand were made legally enforceable by the 1989 Education Act.

In "Education for the 21st Century: A Discussion Document" (Ministry of Education, 1993) the Government presents its vision of the education system of the future. It proposes as a desirable outcome "An education system which enables full access and participation to those students with disabilities" (p. 36). The document also refers to the need for teachers in both special and regular education to have the skills and confidence to cater for a wide range of student abilities. The New Zealand Ministry of Education appears to be working towards providing all special education in regular schools. "Over a longer period of time it will be possible to include in regular school settings all of the students who at the present time receive their education in separate day schools" (Department of Education, 1988, p. 29).

The acceptance of mainstreaming in New Zealand has been made easier in part because the geographical nature of the country and the population distribution has meant that the segregated special education system has never been as firmly established as it is in many other countries (Milne & Brown, 1987). The New Zealand Department of Education, and later the Ministry of Education, appears to have accepted the moral and philosophical arguments for mainstreaming with little question, and much of the debate surrounding mainstreaming has been about how and to what extent the policy should be implemented (Chapman, 1988). Unfortunately, this has not produced a clear articulation of the educational and psychological goals of mainstreaming (Chapman, 1988). Unless

these goals are clearly identified and addressed there remains a significant danger that mainstreaming will result in "the placement of students with special needs into regular classrooms without back-up support, structural changes, or any social or educational goals for these students being articulated ... Such a practice can only be called 'maindumping' " (Chapman, 1988, p. 131). Chapman (1988) warns that mainstreaming will place a heavy burden on regular classroom teachers in New Zealand unless changes are implemented to facilitate the use of planned, structured and systematic individualised programmes, with adequate resource support, in cooperative learning environments.

The Individualised Educational Programme (IEP) has been developed to formalise the process of assessment and the planning and implementation of programmes for students with special teaching needs, as advocated in the Draft Review of Special Education (Department of Education, 1987). As such, the IEP is the educational tool designed to facilitate development of individualised teaching programmes to support students with special educational needs to work toward their individual goals. The 1989 agreement between the Ministry of Education and the SES obliges the SES to ensure that every student accessing additional special education resources has a current IEP.

Preparing Regular Classroom Teachers for Mainstreaming through In-service Training

In-service Training for Mainstreaming in New Zealand

The New Zealand education system is committed to increasing the level of mainstreaming in its schools, but offers few opportunities for classroom teachers to access in-service activities to improve their skills and confidence in mainstreaming situations (Capie, 1987; Chapman, 1992; Chapman & van Kraayenoord, 1987). Renaut (1994) outlines an ongoing project, in the Christchurch College of Education catchment area, which investigates a number of aspects of mainstreaming, including the specific special education qualifications of regular classroom teachers involved in mainstreaming, and the teachers' perceived training needs. The results of this study, currently unpublished, show that 46% of these teachers had no training related to special education or mainstreaming. Of the teachers with no special training, over 95% taught in mainstream settings (J. Renaut, personal communication, January 17, 1995).

In 1991 the Ministry of Education published "Special Education in New Zealand: A Statement of Intent", a document which set out the Government's intentions for special

education. These intentions largely concerned a reorganisation of special education resources across the country. However, one of the main features of the Statement of Intent was the Ministry's intention to plan, in conjunction with training providers, "a programme of teacher development for pre-service, in-service and specialist training" (Ministry of Education, 1992). In January 1995 an inquiry was made of the Ministry of Education regarding the extent to which this feature of the policy was implemented, particularly with respect to in-service training. In response to this inquiry, Merus Cochrane, Senior Manager of the Ministry's Education Management Policy Division, described funds delivered to the Special Education Service (SES) to provide in-service training to teachers, and awards of three "Towards Inclusion" contracts to the SES, to Auckland and Wellington Colleges of Education, and to Central Districts SES and Massey University. These were presented as evidence of the Ministry's commitment to provide in-service training to teachers involved in mainstreaming (M. Cochrane, personal communication, January 17, 1995).

Further discussion with Lottie Thomson of Wellington College of Education, indicated that the "Towards Inclusion" contracts were one-off items delivered over the 1990/1991 period. Since that time there have been few resources provided by the Ministry to support teacher professional development in relation to mainstreaming (C. Thomson, personal communication, January 17, 1995). Furthermore the SES, the agency contracted by the Ministry of Education to provide a number of services, including special education training for teachers, received a cut in the annual hours allocated to training courses in 1993 from 31380 to 6500. The Special Education Service Division of the Psychological Society reported that the result of the budget cut is that SES staff will no longer be able to train mainstream classroom teachers to meet the needs of children with special educational needs (SES slates cutbacks, 1993).

Effectiveness of In-service Training in Preparing Regular Classroom Teachers for Mainstreaming.

Research shows that programmes of in-service training have positive results for regular education teachers working with exceptional children. An in-service programme consisting of ten two-hour seminars in special education techniques resulted in higher levels of special education skills, although it did not improve teacher attitudes to mainstreaming (Johnson, 1980). Teacher opinions and attitudes toward mainstreaming

were improved by an in-service programme which provided them with new knowledge about special needs children, classroom experience with such children, and the support of resource personnel and administrators (Harasymiw & Horne, 1976). Teachers rated themselves as more competent to teach in a mainstreaming setting and more positively disposed to the idea after an intensive eight week summer workshop which provided training in diagnostic skills, remediation-intervention skills, and interpersonal relationship skills. Also included were workshops where teachers worked with students with special educational needs (Glass & Meckler, 1972). In two studies (Brady, Swank, Taylor & Freiberg, 1988; Brady, Swank, Taylor & Freiberg, 1992) Social Studies teachers and Science teachers improved their instructional interactions, not only with the mainstreamed students, but with all students in the class, following a "relatively modest in-service package of effective teaching practices" (Brady et al, 1992, p.531). Following an in-service package of awareness training, teachers decreased the amount of negative, non-supportive interactions they had with students with learning disabilities placed in their class (Siperstein and Goding, 1985). A New Zealand survey (Harvey & Green, 1984) found that teachers who had received some form of training in special education had significantly more positive attitudes toward mainstreaming.

This research suggests that in-service training for mainstreaming is more effective when teachers have direct classroom experience with special needs students. The special education seminars which did not improve teacher attitudes to mainstreaming (Johnson, 1980) did not include opportunities for classroom contact with students with special needs. The training activities investigated by Harasymiw and Horne (1976) and Glass and Meckler (1972) included classroom experience with special needs students and resulted in teachers feeling more competent to teach in mainstreaming situations and with improved attitudes to mainstreaming. Positive changes in teacher attitude and behaviour resulted from the training activities reported by Brady, Swank, Taylor and Freiberg (1988), Brady, Swank, Taylor and Freiberg (1992) and Siperstein and Goding (1985). The teachers in these studies clearly had experience with special needs students, since the training activities took place whilst students with special needs were included in the teachers' mainstream classes.

Renaut (1994) investigated the training received by special and regular educators working with students with special educational needs, and also measured, on a number of

performance indicators, the quality of the programmes provided by all teachers for students with special needs. Special education training for teachers was divided into four categories: a) substantial training (such as Diploma of Special Education or Master of Special Education), b) papers (such as university papers or AST papers), c) short courses (up to a few days duration) and d) no training. The only category of training which was correlated with a significantly higher quality of programme for students with special needs was that of substantial training (J. Renaut, personal communication, January 17, 1995).

One interpretation of this result might be that short courses have no effect on teaching behaviour and thus fail to improve the quality of the educational programmes offered to students with special educational needs (J. Renaut, personal communication, January 17, 1995). This position conflicts with evidence showing that short courses of in-service training have been effective in improving teachers knowledge of, skills for, and attitudes towards mainstreaming, particularly when these courses include, or supplement classroom experience with students with special needs (Brady, Swank, Taylor & Freiberg, 1988; Brady, Swank, Taylor & Freiberg, 1992; Harasymiw & Horne, 1976; Siperstein & Goding, 1985). All of these studies were conducted in the United States, suggesting that Renaut's findings perhaps reflect on the quality and nature of in-service short courses in special education provided in New Zealand. Rather than discounting the efficacy of short courses as a means of training delivery, this result might be seen to underline the importance of reviewing the quality and content of special education short courses in New Zealand in order to increase their effectiveness. Direct comparisons between the findings of Renaut and those of the studies conducted in the United States are difficult, since different measures of effectiveness were employed. Renaut assessed quality of special education programme based on performance indicators, others used measures such as changes in self-reported attitude (e.g., Harasymiw & Horne, 1976) or differences in teachers' classroom interactions with mainstreamed students, assessed through classroom observation (e.g., Brady, Swank, Taylor & Freiberg, 1988).

Assessment of Training Needs for Mainstreaming

Why Ask Classroom Teachers?

A number of authors point out that policies of mainstreaming, which have considerable impact on regular classroom teachers, have originated largely outside of

regular education, with minimal input from regular education teachers (Coates, 1989; Kauffman, Gerber & Semmel, 1988; Myles & Simpson, 1989; Semmel, Abernathy, Butera & Lesar, 1991). As Larrivee and Cook (1979) point out

> while integration may be imposed by binding laws, the manner in which the regular-classroom teacher responds to the needs of the special child may be a far more potent variable in determining the success of mainstreaming than is any administrative or curricular scheme. (p.316).

Gear and Gable (1979) define a "needs assessment in teacher preparation" as "the specification of the discrepancy between what is [in this case, teachers' perceived competence] and what should be [expert ratings of importance for selected skills]" (p. 37, their brackets). A number of studies have followed the pattern of asking "experts" to define what regular classroom teachers need to learn through pre-service or in-service training in order to equip them to teach in mainstream situations. This has included asking chief state administrators responsible for testing teacher competency in special education (Ramsey, Algozzine & Smith, 1990), an interdisciplinary panel of recognised experts in special education (Cannon, Idol & West, 1992), directors of teaching colleges in New York state (Kearney & Durand, 1992), and, in New Zealand, a selection of professionals involved in providing special education or support services for students with special needs (Panckhurst, Panckhurst & Elkins, 1987). Other studies in the United States have reflected Kauffman and colleagues' appeal that "enough respect be shown for regular classroom teachers to ask them what they perceive, based on teaching practice, is feasible, desirable, and in the best interests of the students" (Kauffman, Gerber & Semmel, 1988, p. 9). Researchers have directly surveyed regular classroom teachers (Landers & Weaver, 1991; Larrivee & Cook, 1979; Myles & Simpson, 1989; Schultz, 1982), and student teachers (Leyser & Abrams, 1986). While "experts" and classroom teachers identify many of the same factors as important for successful mainstreaming, there is a tendency for "experts" to identify more theoretical areas, such as knowledge of the philosophy and historical development of special education (Ramsey, Algozzine & Smith, 1990). Teachers, in contrast, tend also to consider pragmatic issues, such as access to support services and administrative support (Larrivee & Cook, 1979).

In New Zealand, the Ministry of Education, in conjunction with colleges of education, has recently investigated the present qualifications and future training needs of

special education educators (Kerslake & Dewar, 1994). However, at the time of inception of this study there appeared to be no New Zealand investigation of regular classroom teachers' perceived training needs, with respect to preparation for mainstreaming. This point is confirmed by Renaut (1994), who remarks that "No study is available concerning the effects of this (mainstreaming) policy ... on the training needs of the mainstream workforce" (p. 13).

There are practical reasons for consulting regular classroom teachers about the nature of the in-service training they feel they need. The main concern is that of ensuring that any in-service activities developed to meet teachers' needs are the sort of activities teachers will attend and comprise content which they will subsequently use in their classrooms. Research has shown that mainstream teachers are highly selective in choosing the strategies and interventions to use with students with special educational needs in their classrooms. Teachers tend to favour interventions that they perceive as time efficient and effective and which are positive rather than punitive (Whinnery, Fuchs & Fuchs, 1991). Secondary school teachers prefer intervention strategies they can implement in their own classrooms, that apply to all students and that require little extra effort (Ellett, 1993). Classroom teachers rate interventions that require only social/motivational adjustments (such as: provide reinforcement and encouragement) as most desirable and feasible (Schumm & Vaughn, 1991). They see adaptations which involve curricular or environmental adjustments (such as: adapt regular teaching materials) as least desirable and feasible. Schumm and Vaughn (1991) suggest this may be because teachers lack the skills and knowledge to make these adaptations and to appreciate their potential value. In-service activities which introduce teachers to strategies which are not of the type they are prepared to use in their classrooms may be of little or no benefit to the teachers or to the exceptional students in those classes.

In-service activities should be directed to the needs of a school and school staff consulted in assessing the training need (Van Tulder, Veenman & Sieben, 1988). Mann (1981) stresses the importance of

> those designing inservice programs (realising) that the inherent worthiness of a practical concept does not insure its acceptance or implementation into instructional programming for students with special needs. Acceptance, in fact, is predicated

upon responding to the needs of the adult population (educators) who are receiving inservice training (p. 66).

Landers and Weaver (1991) also stress the importance of tailoring in-service programmes to the needs of the client group. These authors found that certain core competencies for teaching mainstreamed students were given different priorities by teachers at different teaching levels and in different geographic communities. Holly (1982) investigated teacher perception of valuable in-service training and found that teachers valued informal and participatory activities which they chose themselves. The single most important factor in determining the value teachers put on an in-service activity is its personal relevance to the teacher.

Research suggests that it may be useful to investigate teachers' perceived training needs more than once, since needs, and perception of needs, may vary over time. In a study where teachers were surveyed about their general training needs, three out of four teachers changed their priorities over the course of a 15 month period, although the overall pattern of priorities identified by a large number of teachers remained the same (Marshall, Maschek & Caldwell, 1982). Several studies investigating regular classroom teachers' involvement with mainstreamed students through a school year show that teachers were not necessarily accurate in their initial predictions of the way their involvement with the exceptional students would develop. Regular teachers who were confident in prescribing interventions for students with reading problems had unforeseen difficulty in implementing the interventions (Jenkins & Leicester, 1992). After a year of practice classroom teachers had a much better idea of how to involve a mainstreamed student in the activities of the whole class (York et al, 1992). Giangreco and colleagues (1993) describe how the majority of teachers in their study came to recognise that they could be successful in meeting the needs of the mainstreamed students in their class, which led to a growing willingness on the teachers' part to learn the skills necessary to teach the students effectively.

There is a wide selection of in-service programmes on offer and teachers have limited time and resources to devote to training. To be effective a training programme must first be selected by teachers. If in-service training activities to improve mainstreaming skills are to be offered to regular classroom teachers in New Zealand, it is important that these activities not only meet the needs of these teachers, but are perceived

by teachers as being personally relevant. One way to ensure that training activities address teachers' needs is to investigate what teachers perceive their needs to be with respect to mainstreaming, and to continue to monitor their perceived training needs following initial introduction of mainstreamed students into their classes.

Mainstreaming in Secondary Schools.

A number of factors make mainstreaming a more difficult process in secondary schools than in primary schools. The organisation of secondary school timetables is more fragmented than that of elementary schools. In elementary schools a child spends most of the school day in the same classroom, taught by one teacher. Secondary schools lack this simple, unitary organisation and students circulate between classrooms and teachers, as they study individual subjects (Sayer, 1987). Secondary schools expect higher standards of independence than primary schools. The report of the Office for Standards in Education (1993) emphasises this and states:

> Secondary schools generally want pupils to be more independent in moving around a large school, in managing their own possessions and in having some independent study skills. They want them to be able to work without frequent adult approval. Ability to use the library and to take and make notes are requirements for older pupils particularly (p. 3).

Secondary schools tend to give greater focus to curriculum content and academic outcomes, as opposed to the more global and social outcomes of the elementary school (Sharpe, York & Knight, 1994) and curricular demands increase steadily as students progress through secondary school. In contrast, the basic skills of students with special educational needs tend to plateau in their early teens (Warner, Schumaker, Alley & Deshler, 1980). Consequently, as mainstreamed secondary school students grow older, "the performance gap between these students' abilities and what they are expected to do continues to widen" (Schumaker & Deshler, 1988, p. 37).

Secondary school teachers, typically, will have followed a training pathway involving three or more years of specific subject study followed by a one year teacher training course concentrating on how to best deliver subject content in the classroom (Hegarty, Pocklington & Lucas, 1981). A primary school class will generally cover a wide range of student ability and primary teachers are prepared for teaching in this setting, working independently with individuals or groups of children at various ability

levels. Secondary teachers usually do not have the benefit of the three year, process-orientated study of education typical of primary teachers. Consequently, teachers of older students tend to have less positive attitudes to mainstreaming than teachers at lower age levels (Larrivee & Cook, 1979). Secondary school teachers may also be more resistant to in-service activities than are elementary school teachers (Lyon & Ognibene, 1982).

It is hard for mainstreamed students to succeed in a secondary school environment. School organisation assumes levels of independence and autonomy which students with special needs may be unable to meet without extra support. The curricular demands in the classroom increase steadily as the mainstreamed students grow older, leaving them academically lagging progressively further behind their classmates. The teachers are less likely to feel positively about having the mainstreamed students in the class, and are unlikely to have been trained to provide appropriate educational programmes for them in that situation. This study concentrates on the training needs of secondary classroom teachers as better preparation of secondary school teachers is likely to be a significant factor in improving the outcome for mainstreamed students in secondary schools. It is also within the secondary school sector that the author has direct experience of supporting students and teachers involved in mainstreaming situations.

Research Questions

The questionnaire survey investigates the pattern of training priorities for mainstreaming of a large number of secondary school teachers. The following questions are addressed:

1. Which areas of training do secondary school teachers rate as the most important to prepare regular classroom teachers for teaching in mainstreaming situations?
2. Do teachers with experience of mainstreaming prioritise certain training areas differently from those without experience of mainstreaming?
3. Do teachers who have received training for mainstreaming prioritise certain training areas differently from those without training for mainstreaming?

The case study uses three semi-structured interviews, conducted at intervals during the 1994 school year. The teachers interviewed were teaching mainstreamed students for the first time in their careers. The progressive interviews facilitate investigation of the changes in the teachers' attitudes and perceived training needs during their first experience of mainstreaming. Focus questions for this study are:

i. What knowledge and skills do secondary school subject teachers feel they have in relation to teaching students with disabilities in mainstream classes?
ii. What training needs do teachers feel they have at the start of their mainstreaming experience?
iii. Do their perceived training needs change over the course of their first year of mainstreaming, and what is the nature of the changes?
iv. What are the characteristics of in-service training activities which these teachers feel would best meet their training needs with respect to mainstreaming?
v. Have any of their perceived needs been met during the year, and how?
vi. Have any initially perceived needs proved to be less significant in practice?
vii. Have any initially unrecognised needs been identified during the year?
viii. How successful do the teachers perceive they have been at meeting the needs of the mainstreamed students in their classes, and does this relate to their identified training needs?

ix. Do teachers' perceptions of their success at meeting mainstreamed students' needs affect their future willingness to accept mainstreamed students into their classes?

x. What attitudes do teachers express about mainstreaming at the start of the year, and do these change as their experience of mainstreaming increases?

xi. Do teachers identify concerns or problems during the year that are specifically related to the nature of secondary schools?

Data from both the case study and questionnaire survey methods will provide information about the extent to which New Zealand secondary school teachers are prepared through training to accept students with special educational needs into their mainstream classrooms.

CHAPTER 3: METHOD

Definitions

Mainstreamed Students

A conceptual problem arose with regard to defining the nature of mainstreamed students. A functional definition of "mainstreamed student" was used, referring to any student joining mainstream classes who had been identified by the school's special programmes department or the SES as having special educational needs which, in other circumstances, may have been seen to justify alternative provision. These students had been identified as exceptional by special educators prior to placement into the mainstream class, and the functional definition uses this identification as the defining characteristic. This form of definition was selected for a number of reasons.

First, the two main alternatives, definition by clinical diagnosis or definition on the basis of student performance on psychoeducational tests were seen as inappropriate. The inappropriateness of psychoeducational testing for identifying students with special educational needs has been documented (Galagan, 1985). Furthermore, New Zealand has adopted a non-categorical, needs based approach to serving students with special educational needs (Department of Education, 1987), with the decision as to who should receive special education left to the student's parents, teachers and officers of the SES. As such, there is no requirement for standardised testing or diagnosis of exceptional students which would provide data to allow equivalent comparisons. Even if such data were held, access to student records would involve practical and ethical considerations beyond the scope of this study.

Secondly, when a student is mainstreamed the exceptionality of that student has been identified and brought to the classroom teacher's attention prior to placement in the classroom. Thus to be "mainstreamed" may be, in itself, a labelling process, and labels can engender expectations and reactions. Studies have investigated teachers' attitudes to mainstreaming as a policy or concept, using instruments that presented only broad descriptors of the types of students involved, such as "special-needs students" and "mainstreamed students" (Larrivee & Cook, 1979, p. 323), "mildly handicapped students" (Coates, 1989, p. 533) and "students with mild disabilities" (Semmel, Abernathy, Butera & Lesar, 1991, p. 13) These studies have produced significant data about teachers' attitudes to the concept of mainstreaming. It is assumed that for

classroom teachers, the knowledge that they are to receive a mainstreamed student into their class will raise certain issues and concerns for them, regardless of the individual characteristics of the students involved.

Thirdly, New Zealand rarely has the population density of students with a specific disability to justify their consolidation onto one site. It is therefore unlikely that classroom teachers will need to specialise in providing for students with a specific type of disability, particularly in light of the non-categorical approach adopted by the education system. One aim of this study is to derive suggestions for in-service activities for teachers involved in mainstreaming. To develop conclusions that apply to teachers involved with one or two specific types of student would be self-limiting. It will be more useful to provide guidelines appropriate to the generic form of mainstreaming as practised in New Zealand. As such, it seems appropriate to use in this study the generic definition of "mainstreamed student" described above.

Nevertheless, there are specific considerations for students whose primary disabilities are physical or sensory in nature. Disabled students whose academic and intellectual abilities fall within the accepted range of other students in their classes are likely to gain from regular classroom tuition once the barriers presented by physical or sensory disability are overcome and they have access to the regular curriculum (Swann, 1987). Students whose primary disabilities are intellectual or cognitive in nature present a different challenge to classroom teachers. The presence of these students significantly broadens the range of academic abilities within a class. Meeting the needs of these students in a regular secondary classroom often requires adaptations to curriculum and to instructional and classroom management strategies of a far more fundamental nature than, say, providing Braille or large print material, installation of an induction loop or ensuring wheelchair access. In order to avoid concentrating on the specifics of physical or sensory disabilities, it was decided to include in the case study only teachers who taught mainstreamed students whose disabilities were primarily intellectual or cognitive in nature. The term used in this study to refer to these students, both in the questionnaire study and in conversation with principals and interviewees, was "mainstreamed students with intellectual disabilities".

Special Education Support Staff

There was considerable variation in the terminology used in the various schools involved in these studies to refer to the on-site special educators whose role it was to coordinate mainstream placements and liaise with and support the classroom teachers involved in the placements. Terms used included Special Needs Department, Special Needs Unit, Learning Resource Centre and Special Programmes Department. For ease of reference the term 'Special Programmes' is used throughout this thesis to refer to these departments and the teachers assigned to them.

The Questionnaire Study

Questionnaire Design and Validation

The questionnaire study was designed to investigate which training areas secondary school teachers feel to be the most important for regular teachers with mainstreamed students joining their classes.

A number of authors have investigated or defined the skills and knowledge that all teachers need to possess in order to be able to provide quality education to students with special educational needs in regular classrooms. (Advisory Council for Special Educational Needs, 1990; Cannon, Idol & West, 1992; Gear & Gable, 1979; Hailsey & Gilberts, 1978; Jenkins & Leicester, 1992; Leyser & Abrams, 1986; Ramsey, Algozzine & Smith, 1990; Schultz, 1982). Gear and Gable (1979) group a number of competencies considered essential for mainstreaming into ten categories which they define as:

Professional Knowledge: Knowledge of fundamental issues, terminology, and rationale for mainstreaming.

Classroom Climate of Acceptance: Promoting acceptance of individual differences among all children.

Communication: Communicating with parent, colleagues, and community.

Assessment of Student Needs: Administering and interpreting appropriate tests.

Classroom Management; Managing behaviour and instruction for effective teaching and learning.

Goal Setting; Establishing appropriate goals for the exceptional child.

Resources for Classroom Learning; Managing resources which can be used for instruction of exceptional children.

Instructional Strategies; Planning and implementing a variety of instructional techniques.

Personalized Curricula; Adjusting curricula to suit the ability, need and interest of exceptional children.

Evaluation of Student Progress; Recording and reporting student progress.

(Gear & Gable, 1979, p. 40)

A questionnaire was developed on the basis of the ten categories listed, with modifications based on recommendations or further issues from the literature in the area of teaching competencies required for mainstreaming. The significant additions to the basic competencies and categories proposed by Gear and Gable (1979) include the following: legal and ethical issues concerned with mainstreaming (Hailsey & Gilbert, 1978); teacher self evaluation and the ability to translate relevant research findings into classroom practice (Cannon, Idol & West, 1992); effective participation in Individual Educational Planning (IEP) meetings and effective use of IEPs in the classroom (Ysseldyke, Algozzine & Allen, 1982; Pugach, 1982); understanding what level of expectation is appropriate for a student with special educational needs (York, Vandercook, MacDonald, Heise-Neff & Caughey, 1992); developing strategies for including the exceptional student into the general class activities and meeting an exceptional student's needs in a class without taking away from the rest of the class (York et al, 1992).

On the basis of the literature, a series of 39 competency statements were developed, each of which was included into one of 12 broader training categories. In order to validate the assignment of individual competency statements to the training categories, a validation exercise was carried out. This exercise presented the list of competency statements and the 12 categories, with brief descriptions of the area covered by each category. Participants in the validation exercise were asked to indicate the category to which they considered each competency statement most appropriately belonged. Six special educators, either teachers or officers of the SES, participated in this validation exercise.

Overall agreement was good. There was 100% agreement on 24 of the 39 statements (62%) and a further 7 statements (18%) were assigned to a different category by only one respondent. However, responses for six statements showed significant

disagreement with the original category assignment. "Effective use of classroom support staff (e.g., teacher aides, volunteers)" originally assigned to the Communication category, was assigned to Resources by all six respondents. "Collaboration and consultation with special education staff and other professionals", originally assigned to the Communication category, was assigned to Resources by two respondents. Interestingly, however, "Access to and co-operative work with resource teachers and other specialists", originally assigned to Resources, was assigned to Communication by two respondents. It was apparent that collaboration with a variety of support staff was seen both as a matter of communicating with these individuals and also of using these people as a resource. Therefore it was decided to assign the scores for all three of these statements to both the Communication and Resources categories.

Similarly three other statements were assigned to two categories. "Participating in team approaches to instruction", originally assigned to Instructional Strategies, was also assigned to Communication by three respondents. "Using goals and objectives to guide teaching techniques and adapting these if not working", originally assigned to Instructional Strategies was also assigned to Goal Setting, by four respondents. "Developing tasks to suit a wide range of student ability and individual difference", originally assigned to Personalised Curricula, was also assigned to Instructional Strategies, by two respondents.

With these adjustments the agreement rate for the validation exercise was 91%, with 100% agreement on 30 of the 39 statements (77%). There was no discernible pattern in the remaining disagreements with the original assignments of statements to training categories. The 12 training categories and the assigned teaching competency statements are shown in Table 1.

A questionnaire was designed which presented the 39 teaching competency statements in random order. Respondents were required to indicate on a five point Likert scale their perception of the relative importance of the topic covered by each statement as a training need for regular classroom teachers to prepare them for teaching in mainstreaming situations, a high score indicated high priority. The questionnaire also requested details about the subjects taught by the respondent, the number of years of teaching experience they had, and whether they had taught mainstreamed students with intellectual disabilities or received specific training for mainstreaming.

TABLE 1: COMPETENCY STATEMENTS ASSIGNED TO THE TWELVE TRAINING CATEGORIES

Professional Knowledge
The legal and ethical issues of mainstreaming.
The philosophy, history and rationale of mainstreaming.
Information on various disabilities, their nature, characteristics, terminology used.

Classroom Climate of Acceptance
Assisting regular students to understand individual differences and accept exceptional children.
Developing a positive, supportive classroom climate.
Developing strategies for co-operative learning and including the exceptional child into general class activities.
Promoting equity in the classroom in issues of race, gender, handicap, etc.

Communication
Effective use of classroom support staff (e.g. teacher aides, volunteers).
Participating in team approaches to instruction.
Collaboration and consultation with special education staff and other professionals.
Team-work approaches, understanding roles and responsibilities.
Communicating and collaborating with parents and whanau of exceptional children.
Access to and co-operative work with resource teachers and other specialist support.

Assessment of Student Needs
Theories of assessment and information about formal tests available.
Devising informal tests and curriculum based assessment.
Classroom observation and assessing the teaching/learning environment.

Classroom Management
Behaviour management strategies for behaviour problems.
Pacing lessons and developing a range of activities to suit mixed ability classes.
How to involve the exceptional student without taking away from the rest of the class.
Use of peer-tutoring, individual, small group and large group work.
Maintaining clear routines, structure and consistent consequences in the classroom.

Goal Setting
Developing appropriate short term objectives and long term goals.
Using goals and objectives to guide teaching techniques and adapting these if not working

Resources for Classroom Learning
Access to and co-operative work with resource teachers and other specialist support.
Effective use of classroom support staff (e.g. teacher aides, volunteers).
Selecting and developing suitable materials and equipment.
Collaboration and consultation with special education staff and other professionals.

Instructional Strategies.
Developing effective teaching/learning programs for specific problems.
Participating in team approaches to instruction.
Using goals and objectives to guide teaching techniques and adapting these if not working.
Using effective questioning strategies at appropriate levels
Developing tasks to suit a wide range of student ability and individual difference.
Using task analysis to break down complex tasks into more achievable steps.

Personalised Curricula
Adjusting and adapting curricula to suit ability, needs and interests of exceptional children.
Incorporating objectives for socialisation into the curriculum (to promote independence, responsibility, social skills, etc.).
Developing tasks to suit a wide range of student ability and individual difference.

Evaluation of Student Progress.
Using measures of student progress to guide modifications of programs.
Developing informal evaluation to monitor student progress and effectiveness of programs.
Considering the full teaching/learning environment in evaluation and planning.
Understanding what to expect from various skill levels and what level of accomplishment an exceptional child can hope to achieve.

Individualised Educational Programming
Knowledge of IEP (Individual Educational Programmes) development, design and implementation.
How to participate effectively in IEP meetings.
How to effectively utilize the IEP in the classroom.

Teacher Self Assessment and Development
Self evaluation (monitoring consistency, lesson structure, effectiveness of questioning style, minimising negative interactions with students, etc.).
Translating research findings into classroom practice.

The questionnaire was pilot-tested on a small group of teachers. This test revealed layout changes that would make it easier to follow. These changes were incorporated into the design of the final instrument. The pilot test also highlighted the problem of unfamiliar terminology in the questionnaire. A respondent might simply leave an unfamiliar statement or statements unscored, hence making it impossible for the researcher to distinguish an unscored response from an accidentally omitted response. This would be significant, for instance, if the large majority of respondents were unfamiliar with IEPs and so did not understand the statements related to IEP usage and involvement. If this were the case, then familiarity with IEPs might be a high priority training area, but this would not be identifiable from the data. Accordingly, an instruction was included in the final questionnaire instructing respondents to draw a line through any particular statement which they did not understand. A number of respondents took this option for one or more of the competency statements. However, there was no discernible pattern to the statements which were marked in this way.

The questionnaire included a statement to the effect that responses would be treated with total confidentiality. To this end, the questionnaire was designed to be completed anonymously and respondents were asked not to indicate either their names or the name of the school at which they taught.

Sample and Data Collection

Principals of secondary schools in Wellington and the Hutt Valley were initially approached by letter. An outline of the study was presented in the letter and a copy of the questionnaire included. Seven principals, either by letter or in a follow-up telephone call, gave their permission for the questionnaire to be presented to the teachers in their school. The school office staff at these schools were contacted and their cooperation enlisted to distribute the questionnaires and collect the completed responses and return them on a given date.

Questionnaires were posted to the office staff or principal of the school. Attached to each questionnaire was a brief letter explaining the purpose of the project. The letter encouraged the teacher to complete the questionnaire and instructed them to deliver completed questionnaires to the school office by a certain date. Included with the questionnaires was a letter to the school office staff thanking them for their cooperation

and asking them to return all the completed questionnaires in the post-paid envelope on the day following the return-date specified on the questionnaire.

The Case Study

Sample

Selection of respondents. In November 1993 a letter was sent to principals of high schools in the Wellington, Hutt Valley, Kapiti, Horowhenua and Manawatu areas. The letter explained the basic premise and outline of the research project and asked principals' permission to approach teachers in their school to ascertain whether these teachers would be prepared to take part in the interview study. The letter contained a reply sheet and a post paid return envelope. Thirty seven letters were distributed. Twenty three were returned, of which sixteen indicated the principal's willingness to cooperate. Seven principals declined to take part in the study.

Between 27 January and 1 February 1994 each principal was contacted by telephone and asked to confirm whether there were to be students with intellectual disabilities integrated into mainstream classes in the coming school year. If no students with intellectual disabilities were to be integrated, then no further contact was made with the school with regard to the case study.

If mainstreaming during 1994 was confirmed, the principal of that school was asked whether there would be teachers for whom teaching mainstreamed students would be a new experience. This information was provided either by the principal or the Head of Department or Special Programmes teacher coordinating the timetables of the mainstreamed students.

In total, 15 schools were contacted from Wellington to Palmerston North. Nine schools reported that there would be no teachers receiving mainstreamed students into their classes for the first time during 1994. A number of reasons were given to explain why no new teachers were involved in mainstreaming. These included a low turnover rate of staff, the tendency to use the same teachers for mainstream placements and the fact that mainstreaming was well established at the school.

Six schools reported having teachers new to mainstreaming. In these cases an information sheet was posted to the principal or coordinator to be forwarded to the prospective interviewee. This sheet explained the nature and purpose of the study, the

type and extent of involvement requested of participants and outlined the ethical safeguards and assurances. It also contained contact telephone numbers. Prospective respondents were invited to initiate contact if they were prepared to take part in the study.

The information sheet was distributed to 13 teachers, 10 of whom indicated they were prepared to take part in the study. Of these, one was intending to take a six month leave of absence during the year and so was excluded from the study. The remaining nine teachers were accepted as interviewees.

Data Collection

Initial interviews were held early in the school year, beginning the study with teachers' impressions and attitudes before they had had considerable experience of mainstreaming. Many of the schools involved did not organise mainstreaming timetables until after regular timetabled teaching was under way. Until mainstreaming timetables were determined it was not always known into which teachers' classes exceptional students were to be placed. It was therefore necessary to delay the first interviews until the mainstreaming timetables were organised.

The initial interviews took place from 16 February to 21 March 1994, between three and seven weeks after the school year had begun. The second round of interviews took place during Term 2, from 27 July to 17 August, 1994. The final interviews were held toward the end of Term 3, from 21 November to 9 December, 1994. All interviews were conducted by the researcher. With two exceptions, interviews took place at the interviewee's school, either after the end of the school day or during a non-contact period. Two final interviews were held in the respondents' respective homes.

Interview Procedure. The data collection method for the case study used an elite interview format. "An elite interview is one directed at a respondent who has particular experience or knowledge about the subject being discussed" (Anderson, 1990, p. 223). In case studies, it is usual to seek data from other sources in order to validate the perceptions of the interviewees (Anderson, 1990). In this study, the focus was on how individual secondary school teachers perceived their involvement in mainstreaming and therefore the need to find objective validation was considered to be unnecessary.

The interview questions are included in Appendix B. Each interviewee was asked all questions, however additional questions were included where necessary to seek

clarification of interviewees' answers, to further probe areas of interest or to investigate issues specific to that respondent.

The questions covered the following topics:

Interview 1: Personal and professional information about the teacher, an overview of the mainstream placement, details of the teacher's previous training for mainstreaming and plans for future training, the teacher's perceived training needs, the teacher's general impressions about mainstreaming, and any concerns they might have about the placement.

Interview 2: Changes to the mainstream placement, training received by the teacher and perceived training needs, an overview of the progress of the placement and the teacher's level of involvement in the process of Individual Educational Planning (IEP) for the students.

Interview 3: Changes to the mainstream placement, training received by the teacher during the year and perceived future training needs, the teacher's perception of the degree of success they had had in meeting the mainstreamed students' needs, the teacher's willingness to be involved in mainstreaming in the future, an overview of skills and knowledge the teacher had found useful, an overview of concerns and problems encountered during the year, a retrospective view of information or training that would have been useful at the start of the year, what the teacher would pass on to another teacher in the same situation, a description of how the teacher's views and feelings about mainstreaming had changed over the year.

All respondents agreed to their interviews being taped. Each taped interview was subsequently transcribed and the information condensed from the transcription into a summary. In order to validate the interpretation and summarisation of the interview, a copy of the interview and summary was sent to the interviewee concerned. They were asked to read the transcript and summary and return them with indication of any parts they felt had not been interpreted accurately or did not reflect their perceptions. Names and other details which might identify the interviewee were removed from written transcripts and summaries to ensure anonymity. As a further safeguard, the original tapes of the interviews were erased on receipt of the respondent's validation. To maintain confidentiality, initials only will be used in this report when referring to individual respondents.

CHAPTER 4: RESULTS

The Questionnaire Survey

A total of 405 questionnaires were delivered to the seven schools. One hundred and thirty two completed responses were received. The overall response rate of 33% is disappointing. The response rate of individual schools varied widely. The principals of some schools expressed a personal interest in the research and undertook to distribute the questionnaire during a staff meeting and to encourage staff to complete it. The proportion of questionnaires returned from these schools was much higher than from those at which the principal simply gave permission for the questionnaire and covering letter to be distributed through the internal mail. Certain assumptions are suggested about the characteristics of teachers who responded to the questionnaire and those who did not. Many of the respondents work at schools where principals expressed a particular interest in mainstreaming, teachers who responded to the questionnaire are likely to share this interest. Non-responders may be assumed to be teachers who do not have a particular interest in mainstreaming or who work at schools where mainstreaming is not viewed as a priority. It is likely that the pattern of responses shown in this data represents a "best case" scenario, since teachers who view mainstreaming as a priority would tend to rate issues related to mainstreaming as relatively important. Teachers who do not view mainstreaming as a priority are likely to rate these issues as less important, however these are the teachers less likely to have responded to the questionnaire. If a higher response rate had been seen, a reasonable speculation would be that the data would show lower overall ratings of importance for the mainstreaming training issues.

Analysis of Data

Teachers' experience of and training for mainstreaming. Of the total sample of 132 teachers who returned the questionnaire, 99 (75%) had taught a class which included mainstreamed students, 33 (25%) had not. Only 19 (14%) teachers reported they had received specific training aimed at mainstreaming, 113 (86%) had received no such training. Table 2 shows the combination of these two factors.

Of the 19 teachers who had received training for mainstreaming, 7 reported this to be part of pre-service training, 9 as in-service training, 3 teachers had done this training as post-graduate study and the remaining teacher reported having attended self-organised training through the SES.

TABLE 2. NUMBERS OF TEACHERS IN SAMPLE WITH EXPERIENCE OF MAINSTREAMING AND NUMBERS WHO HAD RECEIVED TRAINING FOR MAINSTREAMING.

Experience of Mainstreaming	Mainstream Training	n	% of total sample
yes	no	84	63.6%
yes	yes	15	11.4%
no	no	29	22.0%
no	yes	4	3.0%

Further statistical analysis of this sample was complicated by the unequal numbers of teachers with and without experience of and with and without training for mainstreaming. When the sample is split along these two characteristics, there are very different numbers of data items in each half of the sample. This inequality of sample size suggests that an assumption of equal variance across the split halves may be unsound. Accordingly, when comparisons between the split halves of the sample were made a heteroscedastic t-test has been used. The heteroscedastic t-test does not assume equal variance in the two samples being compared, making it unnecessary to test for homogeneity of variance in the data to validate the t-test. The heteroscedastic t-test is a more powerful test than the homoscedastic t-test.

Teachers' ratings of training competencies. Table 3 shows the rank order in which the sample of teachers rated the importance of each of the individual competencies as a priority for training for regular education teachers to prepare them for mainstreaming. A high score indicates a rating of high importance; the maximum possible score was 5, the minimum was 1.

TABLE 4: RANK ORDER IN WHICH THE SAMPLE OF TEACHERS RATED TRAINING CATEGORIES.

Rank	Training Category	mean	mode	SD
1	Classroom Management	4.25	5	0.97
2	Classroom Climate of Acceptance	4.18	5	0.98
3	Personalised Curricula	4.10	5	2.31
4	Resources for Classroom Learning	4.00	4	1.02
5	Instructional Strategies	3.99	5	1.51
6	Communication	3.84	5	1.07
7	Evaluation of Student Progress	3.74	4	1.05
8	Teacher Self Assessment and Development	3.73	4	1.05
9	Goal Setting	3.66	4	1.12
10	Individualised Educational Programming	3.55	4	1.20
11	Assessment of Student Needs	3.26	3	1.91
12	Professional Knowledge	3.02	3	1.40

TABLE 3: RANK ORDER IN WHICH THE SAMPLE OF TEACHERS RATED INDIVIDUAL COMPETENCIES.

Rank	Competency Statement	mean	mode	SD
1	Behaviour management strategies for behaviour problems.	4.59	5	0.72
2	Developing effective teaching/learning programs for specific problems.	4.54	5	0.70
3	How to involve the exceptional student without taking away from the rest of the class.	4.42	5	0.88
4	Developing a positive, supportive classroom climate.	4.32	5	0.99
5	Pacing lessons and developing a range of activities to suit mixed ability classes.	4.31	5	0.87
6	Effective use of classroom support staff (e.g. teacher aides, volunteers).	4.23	5	0.93
7	Understanding what to expect from various skill levels and what level of accomplishment an exceptional child can hope to achieve.	4.22	5	0.96
8	Developing strategies for co-operative learning and including the exceptional child into general class activities.	4.18	5	0.93
9	Assisting regular students to understand individual differences and accept exceptional children.	4.15	5	0.94
10	Selecting and developing suitable materials and equipment.	4.13	5	1.00
11	Developing tasks to suit a wide range of student ability and individual difference.	4.12	5	1.02
12	Adjusting and adapting curricula to suit ability, needs and interests of exceptional children.	4.10	5	0.98
13	Using effective questioning strategies at appropriate levels	3.83	5	1.05
14	Promoting equity in the classroom in issues of race, gender, handicap, etc.	4.07	5	1.08
15	Access to and co-operative work with resource teachers and other specialist support.	4.04	5	1.00
16	How to effectively utilize the IEP in the classroom.	4.02	5	0.96
17	Use of peer-tutoring, individual, small group and large group work.	4.01	5	1.02
18	Maintaining clear routines, structure and consistent consequences in the classroom.	3.92	5	1.16
19	Participating in team approaches to instruction.	3.90	5	1.09
20	Self evaluation (monitoring consistency, lesson structure, effectiveness of questioning style, minimising negative interactions with students, etc.).	3.87	5	1.04
21	Information on various disabilities, their nature, characteristics, terminology used.	3.86	5	1.16
22	Incorporating objectives for socialisation into the curriculum (to promote independence, responsibility, social skills, etc.).	3.77	5	1.13
23	Knowledge of IEP (Individual Educational Programmes) development, design and implementation.	3.76	4	1.10
24	Communicating and collaborating with parents and whanau of exceptional children.	3.67	4	1.12
25	Developing appropriate short term objectives and long term goals.	3.67	4	1.15
26	Considering the full teaching/learning environment in evaluation and planning.	3.66	3	1.12
27	Using goals and objectives to guide teaching techniques and adapting these if not working	3.64	3	1.10
28	Using task analysis to break down complex tasks into more achievable steps.	3.62	4	1.15
29	Translating research findings into classroom practice.	3.59	4	1.05
30	Collaboration and consultation with special education staff and other professionals.	3.58	4	1.05
31	Team-work approaches, understanding roles and responsibilities.	3.57	3	1.08
32	Using measures of student progress to guide modifications of programs.	3.56	3	1.03
33	Developing informal evaluation to monitor student progress and effectiveness of programs.	3.51	4	0.93
34	Classroom observation and assessing the teaching/learning environment.	3.29	3	1.09
35	Devising informal tests and curriculum based assessment.	3.24	3	1.2
36	Theories of assessment and information about formal tests available.	3.02	3	1.16
37	The legal and ethical issues of mainstreaming.	2.92	3	1.35
38	How to participate effectively in IEP meetings.	2.85	3	1.21
39	The philosophy, history and rationale of mainstreaming.	2.34	1	1.20

TABLE 5: COMPETENCY STATEMENTS LOADING ONTO THE THREE FACTORS

Factor 1: Meeting Individual Needs	**loading**
Developing appropriate short term objectives and long term goals.	.722
How to effectively utilize the IEP in the classroom.	.690
Developing a positive, supportive classroom climate.	.675
How to participate effectively in IEP meetings.	.673
Team-work approaches, understanding roles and responsibilities.	.671
Promoting equity in the classroom in issues of race, gender, handicap, etc.	.647
Using measures of student progress to guide modifications of programs.	.634
Collaboration and consultation with special education staff and other professionals.	.619
Knowledge of IEP development, design and implementation.	.607
Using goals and objectives to guide teaching techniques and adapting these if not working.	.540
Communicating and collaborating with parents and whanau of exceptional children.	.532
Adjusting and adapting curricula to suit ability, needs and interests of exceptional children	.530
Factor 2: Classroom Management Issues	
Behaviour management strategies for behaviour problems.	.704
Understanding what to expect from various skill levels and what level of accomplishment an exceptional child can hope to achieve	.625
Developing tasks to suit a wide range of student ability and individual difference.	.608
Pacing lessons and developing a range of activities to suit mixed ability classes.	.538
Developing strategies for co-operative learning and including the exceptional child into general class activities	.499
Factor 3: Theoretical Issues	
The legal and ethical issues of mainstreaming.	.770
The philosophy, history and rationale of mainstreaming.	.612
Theories of assessment and information about formal tests available.	.629
Translating research findings into classroom practice.	.397
Training for mainstreaming loads positively onto this factor	*.332*
Experience of mainstreaming loads negatively onto this factor	*-.533*

Teachers' ratings of competencies interpreted as training categories. Rating scores for the 12 training categories were derived by calculating the means of the scores for each of the individual teaching competencies assigned to that category. In the case of competencies assigned to two categories (see Chapter 3), the full rating score for that competency was included in the mean calculation of both training categories. Table 4 shows the rank order in which the categories were placed.

Factor Analysis. A Principal Components Analysis (PCA) was carried out on the rating scores given to the individual competency statements. This analysis revealed ten factors with Eigen values greater than 1.0. These factors accounted for 70% of the variance. Cattell's Scree Test indicated that the first three factors merited further investigation. These three factors accounted for 44.4% of the total variance in the data. The data were further analysed using a three factor Varimax Rotation and the conceptual coherence of each of the factors examined. Lower loading items and those which did not

reflect the main conceptual thrust of the factor were deleted, producing the three factors shown in Table 5

The factors derived from the PCA reflect the following conceptual areas:

Factor 1: Meeting Individual Needs. This factor loads twelve competency areas concerned with the identification of programmes appropriate to the individual needs of mainstreamed students. These include knowledge and use of the IEP process, development of appropriate goals and use of this information to adapt curricula. The importance of collaboration with specialists, parents and whanau is recognised. Also included are issues of inclusion and acceptance of mainstreamed students into regular classrooms.

Factor 2: Classroom Management Issues. This factor loads five competencies concerned with classroom management, which include dealing with problem behaviour and a variety of strategies to cater for a wide range of student ability in the classroom.

Factor 3: Theoretical Issues. This factor loads four competencies associated with theoretical issues, such as the ethics, history and philosophy of mainstreaming, theories of assessment and the use of research findings to develop classroom practice. It is interesting to note that training for mainstreaming is associated positively with this factor, while experience of mainstreaming is associated negatively with this factor.

Subscale scores were produced for each of these factors, based on the mean ratings of the individual competency statements loaded onto the factor. Table 6 shows the mean, modal score and standard deviation for each factor subscale. The sample was split on the basis of whether respondents had received training for mainstreaming, and 2 tailed t-tests were used to investigate the differences in response between teachers with and without training. Similarly, the differences in response of teachers with and without experience of mainstreaming were investigated. The split data figures for each factor and the results of the t-tests are also shown in Table 6

Of the three factors, respondents rated Classroom Management Issues (Factor 2) as the most important, with an overall mean priority rating of 4.29. For this factor, there is no significant difference between the responses of teachers with and without training and those who have and have not taught mainstreamed students.

TABLE 6: MEANS, MODES AND SD OF SUBSCALES BASED ON THE THREE FACTORS AND T-TEST PROBABILITIES FOR SPLIT DATA ACCORDING TO TEACHERS' EXPERIENCE OF AND TRAINING FOR MAINSTREAMING.

Factor 1: Meeting Individual Needs	**Mean**	**Mode**	**SD**	**t-test, 2 tailed probability**
Total sample	3.77	5	1.534	
Teachers with training for mainstreaming	4.14	5	2.99	
Teachers with no training for mainstreaming	3.70	5	1.13	0.00 *
Teachers with experience of mainstreaming	3.76	5	1.138	
Teachers with no experience of mainstreaming	3.79	3	2.34	0.72
Factor 2: Classroom Management Issues				
Total sample	4.29	5	0.91	
Teachers with training for mainstreaming	4.27	5	0.91	
Teachers with no training for mainstreaming	4.29	5	0.90	0.87
Teachers with experience of mainstreaming	4.28	5	0.93	
Teachers with no experience of mainstreaming	4.32	5	0.85	0.67
Factor 3: Theoretical Issues				
Total sample	2.97	3	1.85	
Teachers with training for mainstreaming	3.27	3	1.29	
Teachers with no training for mainstreaming	2.95	3	1.92	0.17
Teachers with experience of mainstreaming	2.91	3	1.98	
Teachers with no experience of mainstreaming	3.25	3	1.33	0.06

Respondents rated Meeting Individual Needs (Factor 1) as less important than Classroom Management Issues (Factor 2), with a mean subscale rating of 3.77. This does not seem to be affected by whether teachers have taught mainstreamed students or not. However, teachers who are trained for mainstreaming rate this factor significantly higher than teachers without this training ($p=0.00$). This suggests that the special education training received by teachers has made them more aware of the importance of addressing the individual needs of mainstreamed students.

Respondents rated Theoretical Issues (Factor 3) of comparatively low priority, with a mean subscale rating of 2.97. Teachers trained for mainstreaming appear to rate this as more important than untrained teachers, although this difference is not statistically significant. This may indicate that teacher's training for mainstreaming has raised their awareness of the importance of understanding the theoretical issues concerned. Teachers who have taught mainstreamed students appear to rate this factor less important than teachers without experience of mainstreaming. This difference approaches statistical significance ($p=0.06$) and may reflect a tendency for teachers involved with mainstreaming to reject theory-oriented training, placing greater value on practical-based activities.

Interpretation of Data

One issue highlighted by the data concerns the extent to which teachers are accepting mainstreamed students into their classes without receiving prior training. Three

quarters of the teachers in this sample reported that they had taught mainstreamed students with intellectual disabilities. Of these, only 15 % had received specific training aimed at mainstreaming. Therefore, 85% of the teachers who had taught mainstreamed students had not received specific training. This finding concurs with that of Renaut (J. Renaut, personal communication, January 17, 1995), who reports that the majority of mainstreaming teachers in his survey had received no training in preparation for teaching mainstreamed students. This finding also lends support to the statements of Chapman and van Kraayenoord (1987), Capie (1987) and Chapman (1992) that teachers in New Zealand are inadequately prepared for mainstreaming.

The survey data also provides information about those areas of training New Zealand secondary school teachers rate as the most important to prepare regular educators for mainstreaming. These appear to cover three areas, the highest priority given to concerns of classroom management. This is followed by meeting individual needs, which includes effective use of the IEP process and individual goals, as well as issues of inclusion and communication. The lowest priority area is that of theoretical issues.

Teachers' prioritisation of practical classroom and instructional issues above theoretical issues is not counter-intuitive. Teachers with experience of mainstreaming rated the theoretical issues factor as less important than did teachers with no experience of mainstreaming (this difference approached statistical significance). This implies that mainstreaming teachers prefer training activities with greater practical classroom application above theoretically oriented training, which they perceive to have less personal relevance. The low priority accorded to theoretical issues may also reflect teachers' belief that they have sufficient understanding of the theory and background of mainstreaming and therefore require no further training on this aspect.

Teachers who have received training for mainstreaming rated the competencies on the factor "Meeting Individual Needs" significantly higher than did teachers with no training for mainstreaming. This suggests that training for mainstreaming raises teachers' awareness of the importance of meeting a student's individual needs through the use of techniques such as the IEP process, goal setting, curricular adaptation, collaboration with the student's family and other professionals, and the facilitation of the exceptional student's acceptance into the mainstream class.

The Case Study

The information from the taped and transcribed interviews was collapsed into summaries, both transcript and summary were returned to the interviewee for validation. Summaries of the interviews for each of the case study respondents are included as Appendix C. Table 7 presents a summary of information regarding the interviewees and the mainstreamed students in their classes, details of the placements, the interviewee's previous special needs training and any related training received during the year. Further information from these summaries was collapsed into tabular form, included as Appendix D. The interviews also provided information on a number of aspects of school procedure which interviewees described as having impact on the mainstream placements. These aspects are summarised in tabular form in Appendix E.

It is difficult to extrapolate from a case study of nine individuals to make generalisations which could confidently be applied to all New Zealand secondary school teachers. However, bearing in mind this limitation, the data from the case study does provide answers to issues raised in the research questions guiding this investigation.

i. What knowledge and skills do secondary school subject teachers feel they have in relation to teaching students with disabilities in mainstream classes?

All respondents expressed a need for training to better equip them to teach in a mainstreaming situation. The three respondents who had received previous training felt that this had not been adequate.

> *Interviewer: Have you done any training re mainstreaming or special education before?*
>
> *RJ: I did special education as part of a degree, but that's ages ago. So the answer is, honestly, "No". (RJ, 10.3.94).*
>
> *LH: As part of initial training what we did was become more aware of the nature of disabilities within the classroom and the special nature of students' abilities and to be aware of it. But they didn't deal with the actual ... they looked at ESOL more than they looked at physical and intellectual disability. (LH, 18.2.94).*

TABLE 7. SUMMARY OF DATA FROM CASE STUDY INTERVIEWS

Case Study Interviewees	**TM**	**LH**	**MW**	**MS**	**TB**	**RJ**	**VM**	**JL**	**TS**
Age	26	24	26	26	31	38	52	23	34
Gender	male	female	female	male	male	female	female	female	male
Teaching experience	none	1 year	2 years	1 year	none	17 yrs	17 yrs	none	10 yrs
Subjects taught	PE, Health	Social Studies, Drama, History	Social Studies, English, Maths	Workshop Technology, Graphics	Workshop Technology, Graphics & Design, Design Technology, English	PE, Health	Social Studies, English, History	English, Typing	Geography, Social Studies, Tourism Studies.
Type of school	Boys	Co-ed	Girls	Co-ed	Co-ed	Co-ed	Girls	Co-ed	Co-ed
School roll	620	970	740	570	760	570	740	980	980
Details of Mainstreamed Placements									
Number of mainstreamed students taught by interviewee	1	2	2	1	3	3	2	2	3
Class(es) containing mainstreamed students (number of mainstreamed students in each class in brackets)	3rd form PE (1) Form Class (1)	3rd form Social Studies (2) Drama (2) Form Class (2)	4th form Social Studies (2)	3rd form Woodwork (1)	3rd form English (1) 5th form Workshop Tech (2)	3rd form Health (2) PE (3)	3rd form Social Studies (2)	3rd form English (1) 5th form Typing (1)	3rd form Social Studies (3) Form Class (3)
Teacher changes affecting placement		Changed role to Head of Drama mid-year. Stopped teaching classes but remained as form teacher	Not teaching these classes during Term 3				Not teaching these classes during Term 3		

TABLE 7. SUMMARY OF DATA FROM CASE STUDY INTERVIEWS (CONTINUED)

	TM	LH	MW	MS	TB	RJ	VM	JL	TS
Placement changes during year	Student removed from PE and form class after 8 weeks of Term 1. During Term 3 two more mainstreamed students joined a 3rd form PE class.			School year split into modules, two per term. Student attended four modules		School year split into modules, two per term. Term 1, one student in Health module. Term 2, three students in Health and PE modules. Term 3, one student in PE module		3rd form student left school to attend residential special school.	
Classroom teacher was consulted prior to placement	No	No	No	No	No	No	Not known, VM did not start until several weeks into Term 1.	No	Yes. Consulted at end of previous year.
In-class support provided	No	Teacher Aide for 1 period of 6 per week, increasing to 3 of 6 per week	Special Programmes Teacher for all 4 periods per week (though at times Special Programmes Teacher was late or failed to attend due to other commitments)	None for Terms 1 and 2. MS refused student because of large class size for first module of Term 3, received Teacher Aide for second module of Term 3.	No. Occasionally Special Programmes Teacher taught class while TB worked individually with mainstreamed student.	No	Special Programmes Teacher for 3 periods of 4 per week, increasing to all 4 periods per week	No	No. Confident that it would be provided if requested.

TABLE 7. SUMMARY OF DATA FROM CASE STUDY INTERVIEWS (CONTINUED)

	TM	LH	MW	MS	TB	RJ	VM	JL	TS
Training for Mainstreaming									
Interviewee had received previous training for mainstreaming or for teaching students with special needs.	No, but TM had spent some time working with a student with special needs	Pre-service teacher training included disability awareness training. LH felt this to be inadequate.	No	No	Pre-service teacher training included 2 hour seminar on special needs plus observation of special class. TB felt this to be inadequate.	Pre-service teacher training included study of special needs. RJ felt this to be inadequate. Some in-service courses attended on PE for students with special needs.	No	No	No, but TS had spent some time working with students with special needs.
Interviewee planned to receive training for mainstreaming during 1994 (initial interview)	No. Own priorities elsewhere.	Asked special programmes staff to identify suitable courses.	No	No. School priorities elsewhere.	No. Own priorities elsewhere.	No	No	No	No
Interviewee had received training for mainstreaming during 1994 (final interview)	No	No. School's level of resources for training did not allow.	No	No. MS felt his work load was too heavy to allow time for training for mainstreaming.	No	No	No	No	No

TB: We had (I've forgotten his name) from the college of education. He came and talked to us for a couple of hours. He's just dynamic. It was really good, really well done, but you can't condense what is a one year course into two hours. (TB, 9.3.94)

ii. & iii. What training needs do teachers feel they have at the start of their mainstreaming experience? Do their perceived training needs change over the course of their first year of mainstreaming, and what is the nature of the changes? The training needs most frequently cited by teachers at the initial interview were the preparation and adaptation of classroom materials and resources (67%), strategies for mixed ability teaching (44%), strategies for dealing with challenging behaviour (33%), collaborating with and understanding the roles of special education specialists (33%), individualised educational programming (22%), and meeting the needs of the mainstreamed students without taking away from the rest of the class (22%).

At the end of the year, preparation and adaptation of resources continued to be the training need identified by most respondents (55%). Individualised educational programming was identified by more respondents (44%) than at the start of the year. Classroom strategies for mixed ability teaching and mainstreaming were identified by 3 respondents. At the end of the year none of the respondents included strategies for dealing with challenging behaviour as a training need. Several new areas of training, predominantly concerning a greater understanding of individual differences in an educational context, had been recognised by teachers through the year. These were: understanding and catering for individual needs (33%), understanding specific disabling conditions and their related problems (33%), and monitoring progress of mainstreamed students (33%).

The training needs identified by the case study interviewees, classified in relation to the factors identified in the questionnaire study, are summarised in Table 8. At initial interview, training needs associated with "Classroom Management" and "Meeting Individual Needs" factors were identified approximately equally. By the end of the year the frequency of training needs associated with "Classroom Management" being identified had dropped markedly, while for those associated with "Meeting Individual Needs" this had nearly doubled. The change in relative importance of these two areas is accounted for largely by interviewee's recognising during the year that strategies for

problem behaviour were not a priority, and by their recognition of the additional areas related to individual differences.

TABLE 8: TRAINING NEEDS IDENTIFIED BY CASE STUDY INTERVIEWEES.

	Number of Teachers Identifying Need (n=9)	
Interviewees' Perceived Training Needs	**At Initial Interview**	**At end of year**
Training needs related to 'Meeting Individual Needs' Factor		
Preparing appropriate resources and materials related to class topic	6	5
Understanding specialist roles, collaborating with specialists,	3	0
Individualised Educational Programming and effective use of IEPs in the classroom	2	4
Understanding and catering for students' individual needs	0	3
Monitoring progress of mainstreamed students	0	3
Information on specific disabling conditions and related problems	0	3
Adapting programmes, lesson plans and teaching strategies for mainstreaming	0	2
Developing appropriate goals for mainstreamed students	0	1
Total	***11***	***21***
Training needs related to 'Classroom Management' Factor		
Strategies and skills for mixed ability teaching	4	3
Strategies for dealing with challenging behaviour	3	0
Meeting mainstreamed students' needs without taking away from rest of class	2	
Understanding expectations appropriate to mainstreamed students.	0	1
Strategies for including mainstreamed students into class activities	0	1
Total	***9***	***5***

Preparation of appropriate resources and materials was an area of training with a low loading onto the "Meeting Individual Needs" factor in the questionnaire study. However, this was the training need identified by most teachers in the case study, both initially and after a year of mainstreaming experience. This pattern contrasts with the findings of Schumm and Vaughn (1991) who found that few teachers identified the adaptation of teaching materials as a highly desirable process.

iv. What are the characteristics of in-service training activities which these teachers feel would best meet their training needs with respect to mainstreaming?

Most of the respondents felt their training needs for mainstreaming would best be met through a short course. Many respondents (56%) considered this should be supported by periodic follow-up sessions. Three respondents also felt they would learn by observing good mainstreaming practice in other classrooms. Two others felt receiving feedback from an 'expert' who had observed their own classroom would be useful. Several respondents stressed the importance of training being oriented to practical issues rather than being heavily theory based.

RJ: I don't want the theory behind why (the mainstreamed student) is there. It would have to be practically oriented to look at the material that we've got and the requirements, and then devise activities of how she can get the most out of it. (RJ, 10.3.94)

VM: I don't want any theory, I don't want to be told this or that. I'd like to watch other people, experts, taking the kids. (VM, 15.3.94).

v. Have any of their perceived needs been met during the year, and how? None of the respondents had received formal in-service training directed to improving skills for mainstreaming during the year. However, seven of them felt that they had learned valuable skills and knowledge from other sources. Four respondents recognised that the cooperative learning strategies they had learned during the year were appropriate and useful for teaching in mainstreaming situations. Respondents had learned these strategies through their school's support programme for first year teachers or through in-service training on cooperative learning. The attendance of two respondents at a 100 hour cluster course on cooperative learning was coincidental to their mainstreaming role, and had not been predicated by their having mainstreamed students in their classes.

Three respondents recognised that they had learned through working with and observing the teachers from their Special Programmes department, especially in the area of adapting classroom work and materials to a level appropriate to the mainstreamed students. Two respondents felt they had learned through attending their students' IEP meetings.

vi. Have any initially perceived needs proved to be less significant in practice? All of the respondents who identified strategies for dealing with challenging behaviour as a training need at the start of the year had found during the year that this was not necessary. Respondents realised that their initial concerns in this area had stemmed from their unfamiliarity with mainstreamed students. These concerns proved to be unfounded in practice.

Interviewer: Were there any issues, concerns or problems that you anticipated at the start of the year but which did not arise?

VM: Yes. The whole thing about unusual behaviour from C and A. That certainly never arose. They're two of the most normally behaved people in the class. (VM, 6.12.94)

TS: I guess you expect a certain sort of behaviour appropriate to their learning age but it doesn't always happen like that. The three students I have are not behavioural problems as such, more learning problems. So you divorce the learning problems from the rest. (TS, 18.8.94)

vii. Have any initially unrecognised needs been identified during the year? The main areas of initially unrecognised need related to catering for individual students in an educational setting. Two thirds of the respondents felt they had not been given enough information about the individual characteristics and needs of the mainstreamed students in their class or about the goals these students were expected to achieve during the placement. Respondents identified training areas to do with a greater understanding of individual needs (56%), individualised educational programming to set student goals (44%) and techniques to monitor the progress of the mainstreamed students in their classes (33%). Respondents described how a lack of knowledge of these areas left them unable to plan effective programmes for the mainstreamed students and lacking objective evidence to confirm the progress made by the mainstreamed students. One respondent felt the resulting lack of direction contributed to her stress level.

viii. & ix. How successful do the teachers perceive they have been at meeting the needs of the mainstreamed students in the classes, and does this relate to their identified training needs? Do teachers' perception of their success at meeting mainstreamed students' needs affect their future willingness to accept mainstreamed students into their classes? Eight of the nine respondents felt that they had been at least moderately successful at meeting the needs of the mainstreamed students placed in their class(es) and felt that these placements had been successful. Respondents generally expressed a willingness, in some cases an eagerness, to take mainstreamed students in the future. The exception to this pattern was one teacher who felt that he had not been successful at meeting the needs of his mainstreamed students and who described how his enthusiasm for mainstreaming had lessened during the year. He felt this was, in part, because he was a first year teacher and therefore still developing his own teaching style and strategies. He felt it might have been more beneficial to the mainstreamed students to place them with a more experienced teacher.

TM: Basically, being in my first year teaching I'm moulding my own routines and strategies for these kids as it is, without having to add that extra component of the

mainstreamed child, of giving him what he needs. You know, I'm trying to give the class what they need, that's the whole thirty kids to one at the moment. (TM, 6.12.94)

This pattern of results concurs with the finding of Larrivee and Cook (1979) whose study showed that the most significant factor in teacher attitude toward mainstreaming was a teacher's perception of the degree of success they had teaching students with special needs in the past.

An important factor in the perceived success of the mainstreamed placements was the social acceptance of the mainstreamed students by their peers. Four respondents reported being impressed by the level of encouragement and support classmates had shown the mainstreamed students. Two respondents recognised a need to work to involve the mainstreamed students in class activities more, three others felt work with the other students in the school was needed to eliminate undesirable behaviour, such as bullying.

One respondent felt a major factor contributing to the success of the mainstreamed students placed in his classes was the higher standards the regular classroom setting presented to the mainstreamed students.

TB: I don't know if they aspire to the other students or what, but the standards are higher. It's like playing a game of rugby against a hard team, you play a better game than if you've got someone who's dead easy, you don't play a very good game, do you? I guess that's the only analogy I can think of. (TB, 25.11.94)

Respondent's identified training needs were, to a degree, related to factors which they reported as hindering the success of the mainstreamed placements. Four respondents reported that without clear goals or objective measures of student achievement it had proved difficult to accurately assess the success of the placement. These respondents, at the end of the year, identified their training needs to include the development of IEPs and their use in the classroom (3), understanding and catering for individual needs (2) and monitoring progress for mainstreamed students (1).

x. What attitudes do teachers express about mainstreaming at the start of the year, and do these change as their experience of mainstreaming increases? At the initial interview, five of the respondents said they felt comfortable with the mainstreaming situation, although for two of them, their degree of comfort was dependent on the

maintenance of in-class support at the current level. Respondents were able to identify possible benefits from the placements for both the mainstreamed students and the others in the class. Four respondents felt that they had not been adequately prepared by their school for the mainstreamed placements, and three expressed some degree of concern or anxiety about the placement.

> *JL: At the beginning I was in this major tizz because I didn't really have any idea what I was supposed to do. I was being relied on to teach these kids and I had no idea what I was expected to do or what I could expect of them. Just terrible really, stressed out about it. (JL, 1.12 94)*

Despite this, all of the respondents interviewed accepted the mainstreamed student(s) into their class(es). Seven respondents reported that they had not been consulted in the placement decision and were not given a choice about receiving the student(s) into their classrooms. One respondents had received no prior indication that mainstreamed students would be included in their classes.

> *MW: I wasn't even told that I was going to have special needs kids in my classes and I had to find out with them being in class in the first session and me asking them to go around the room to tell me about themselves and obviously I could tell that there was something different about these two young women (MW, 4.3.94)*

There was some suggestion that teachers might have been able to influence the placement decision if they had complained after the fact.

> *TM: I guess if I'd kicked up a stink he may have been removed, but I wouldn't ... (TM, 16.2.94)*

At the final interview all three respondents who had expressed anxiety initially reported that this had decreased over the year. Two of these were the teachers who had identified strategies for problem behaviour as an initial training need, and they felt their anxiety had been associated with their unrealistic expectations of the mainstreamed students behaviour. As they came to realise their mainstreamed students were unlikely to present behaviour problems, their anxiety decreased. The teacher for whom the mainstream placement proved unsuccessful and whose student was removed to another class reported that his enthusiasm for mainstreaming had decreased over the year. However, two other respondents reported that their experience had reinforced their initial support for mainstreaming.

Seven teachers reported that the opportunities to share in the successes of the mainstreamed students in their classes were among the highlights of the year. Two respondents remarked on the satisfaction of seeing mainstreamed students putting to good use social skills strategies they had been taught during the year. One teacher reported that a highlight of the year for him was seeing the other students in the class coming to recognise the skills of the mainstreamed students.

Procedural Issues

Although the primary aim of this case study was to investigate the perceived training needs of regular classroom teachers involved with mainstreaming, a number of significant issues were raised by subjects during the case study interviews, which have a bearing on those teachers' preparedness to successfully meet the individual needs of the mainstreamed students in their classes. These issues are summarised in Appendix E

Goals and expectations. Six respondents reported that they did not feel they had been given sufficient information on the goals of the placement for the mainstreamed students. They felt they needed more information about the individual strengths and needs of the students and the level of achievement which it was appropriate for the teacher to expect from the students. Respondents reported that lack of this information resulted in their being unable to confirm whether the mainstreamed students had made the desired progress during the year, since there were no clear goals against which to measure their achievements. Also, without a clear idea of the mainstreamed students' goals and expectations, respondents felt unable to plan programmes specifically to help the students achieve those goals

> *RJ: I think the goals need to be more clearly defined. I think there's got to be a purpose behind me getting that student and that's what I perceive the staff, the special needs people, need to be defining. If it was mixing in with others, if that was the goal, to get her participate in the games, I would probably set up specific students in different classes to specifically look after her. Maybe give her to the most able student or most able group and got them to work with her, if that was the goal. If the goal was to do something physical so she could improve her throwing and catching skills I'd set up a programme where a senior student could do that as part of their sixth form certificate. So if they can have a definite goal in mind then I can set out to achieve it. (RJ, 23.11.94)*

IEPs. Throughout the year six of the nine respondents had been involved in the IEP process for at least some of the mainstreamed students placed in their classes. Five teachers had attended IEP meetings, another had contributed written reports via the Special Programmes teacher. None of the respondents reported receiving clear feedback from the IEP process, with respect to student goals or objectives, or adaptations to classroom strategies.

Assessment and monitoring student progress. Five respondents described difficulties in assessing progress made by the mainstreamed students in their classes. Monitoring the progress of mainstreamed students was identified as an ongoing training need by three respondents at their final interview. Respondents felt that a lack of systematic assessment meant that they had no objective evidence of academic progress made by the mainstreamed students. One teacher also pointed out that systematic monitoring would have provided him with information which he could have used to modify the students' programmes during the year, without this there was no guarantee that the students' individual needs were being met.

> *TB: I guess really I need to monitor the students. I haven't really monitored that particularly well. Sure I've said they've made progress and that they've concentrated longer for longer periods of time and they can start and finish work or something like that. But in terms of skills that they've learned I couldn't say, "Hey they've learned these five skills but they've missed out on these two". If I'd monitored I could have a look at it half, three quarters of the way through the year and say "Hey, we'll throw in that". So it's not a particularly balanced programme and so that's where I need training. (TB, 25,11,94).*

Two respondents remarked that the standardised school report system was inappropriate for recording a meaningful picture of the mainstreamed students' achievements during the term. By the third interview one teacher was confident that she had overcome the problem of assessment for the mainstreamed student in her Typing class. She assessed the student's progress by comparing his current performance against his previous achievements. She felt this provided a more accurate measure than would have been gained by comparing his performance against that of his classmates. She felt other teachers newly involved with mainstreaming could benefit from an understanding of this "distance travelled" form of assessment.

CHAPTER 5: DISCUSSION

The two studies reported in this thesis provide insights into a variety of issues related to the involvement of regular classroom teachers in the mainstreaming of students with special educational needs.

Teacher Attitudes Towards Mainstreaming.

The data from the case study with regard to teacher attitude toward mainstreaming presents a picture very similar to the findings of previous studies. Teachers do appear to accept the right of students with special needs to receive education in regular classrooms (cf. Zigmond, Levin & Laurie, 1985). However, teachers are concerned about their lack of skills for teaching mainstreamed students and doubt their abilities to provide appropriate education (cf. Larrivee, 1981; Lyon & Ognibene, 1982; Semmel, Abernathy, Butera & Lesar, 1991). The initial reaction of some teachers to the placement of mainstreamed students into their classes is one of caution, fear or anxiety (cf. Giangreco, Dennis, Cloninger, Edelman & Schattman, 1993). Giangreco and colleagues describe how many teachers in their study underwent "transformations" where they "experienced increased ownership and involvement with the student with severe disabilities in their classes over the course of the school year" (p. 364). Changes of this nature were apparent for most of the teachers in the case study, as they began to recognise the successes of their mainstreamed students and to grow more confident in their ability to help these students progress academically and socially. The teacher who was the most overtly anxious about the mainstream placement at the initial interview became, at the final interview, one of the most positive about her degree of success meeting the needs of the mainstreamed student in her class. This teacher, and another who had admitted to being initially fearful at the prospect of teaching mainstreamed students, included in their advice to other teachers in a similar situation the phrase "don't worry". Most of the teachers in the case study described high points in their year to be the opportunity that the placements had given them to share in the achievements of the mainstreamed students and the related growth in the students' confidence and self-esteem.

The teachers in the case study who believed they had been successful at meeting the needs of the mainstreamed students in their classes were all prepared, and in some cases were very keen, to take mainstreamed students in the future. However the teacher who felt he had been unsuccessful at meeting these needs indicated he would be far more

cautious about accepting mainstreamed students in his class in the future (cf. Larrivee & Cook, 1979).

Preparation of Classroom Teachers for Mainstreaming

Data from this study highlight the lack of preparedness of classroom teachers for teaching in mainstreaming situations. Of the surveyed teachers, 85% reported that they taught mainstreamed students having had no prior related training. Of the 9 case study respondents, 6 had not received any prior training related to special education, and the 3 teachers who had received such training considered that this had been insufficient. Case study respondents were able to articulate their training needs clearly, all felt they needed further training for mainstreaming. Despite this fact, none of the respondents received any training for mainstreaming during the course of the year. These findings lend support to the position taken by authors (Capie, 1987; Chapman, 1992; Hornby & Murray, 1987) who claim that classroom teachers in New Zealand are inadequately prepared for mainstreaming.

Responses to both the case study and the questionnaire support the argument that regular education teachers need training for mainstreaming. All case study respondents commented on their need for training for mainstreaming and all were able to identify specific areas of importance for them. The questionnaire respondents were required to rate specific training areas on a Likert scale. Respondents considered almost all areas of training to have moderate to high priority, and none to have low priority. Several respondents scored all competencies on the questionnaire at the maximum rating of 5 and one respondent added a written comment: *"All these topic areas are high priority. I can't believe they could be rated anything less".*

Teachers' Perceived Training Needs

The areas of training need identified by the case study respondents, taken as a group, reflected similar priorities to those shown by the questionnaire survey. Training needs identified by individual teachers did change over time (cf. Marshall, Maschek & Caldwell, 1982).

It seems reasonable to assume that the training areas which teachers rate as the most important are those which they perceive to have greatest personal relevance. Therefore training which incorporates these areas should be seen by teachers as attractive and

valuable in-service activities (Holly, 1982). The data from these studies suggests the content of such a training package will cover the following areas:

1. Classroom Management Issues: Strategies for dealing with problem behaviour; how to develop a variety of activities and lessons to suit a wide range of student ability; strategies for cooperative learning; appropriate expectations of mainstreamed students.
2. Addressing Individual Needs: The IEP process, its design and effective use in the classroom; participation in IEP meetings and collaboration with parents, whanau and special education professionals; development of appropriate goals used to guide adaptations of curricula, teaching techniques and materials; strategies to facilitate inclusion and acceptance of the exceptional student into the mainstream class.
3. Theoretical Issues: The philosophy and rationale of mainstreaming; legal and ethical considerations; theories of assessment; development of classroom practise from research findings.

The first and second areas are those teachers rated most important. Teachers' initial prioritisation of classroom management issues may reflect their anxiety that inclusion of exceptional children will cause major disruption to their classes. However, as their involvement with mainstreamed students progresses, and the anticipated disruption fails to materialise, teachers become more aware of the importance of meeting the individual needs of the mainstreamed students and begin to place greater emphasis on training needs related to this area.

The area rated the lowest priority by teachers is that of theoretical issues. Training activities which present as predominantly theory-based are unlikely to be attractive to mainstreaming teachers.

The majority of teachers in the case study acknowledged the importance of training activities involving classroom experience of students with special educational needs, either through observation of good practice or through expert appraisal of their own classroom practice. This concurs with the research findings that training programmes which include classroom practice with special needs students (e.g. Harasymiw & Horne, 1976; Glass & Meckler, 1972) have greater effect on teacher attitude and competence than programmes without this component (e.g. Johnson, 1980).

The Effectiveness of Short Courses

Case study interviewees expressed a clear preference for training for mainstreaming delivered through short courses. However, Renaut's results suggest that short courses have minimal effect on improving the quality of programmes offered to students with special needs (J. Renaut, personal communication, January 17, 1995). It seems unlikely that a significant number of classroom teachers would be prepared to undertake a substantial course of study such as a Master of Special Education in order to better support mainstreamed students, who are always likely to be a minority in their classes. This being the case, rejection of short courses as an effective method of delivering training for special education or mainstreaming seems to run the risk of "throwing the baby out with the bathwater".

The majority of questionnaire respondents who had received training for mainstreaming had done so through in-service activities, less than one sixth had done so through post graduate study. The results of the survey do show that the value attributed to certain areas of training by teachers who have received training for mainstreaming are significantly different to that attributed by teachers without such training. It cannot be assumed that it is necessarily the training that effected this difference in attitude. However one possible explanation for the differences in perceived value of areas of training, such as those involved in addressing individual needs, is that training has been effective in making teachers more aware of the importance of these aspects of mainstreaming.

Challenging Behaviour

There appears to be some contradiction in the importance attributed by teachers to training which offers strategies for dealing with challenging behaviour. Questionnaire respondents rated this the most important training competency of all. One third of the case study respondents identified this as an area of training need at their initial interview. However, all of the respondents decided during the year that such training had not been necessary. Two of the respondents recognised that their initial perceived need had arisen from an unfamiliarity with mainstreamed students, which led to unfounded expectations that students would exhibit challenging behaviour. A corresponding difference in perception between teachers with experience of mainstreaming and those without was not reflected in the questionnaire data. Teachers with experience in mainstreaming did not

give a significantly lower rating to training in strategies for dealing with problem behaviour than teachers with no experience in mainstreaming.

This presents a dilemma when making recommendations for training related to mainstreaming. As demonstrated by the case study sample, not all mainstreamed students exhibit challenging behaviour. However some will, and those that do can present a serious problem to classroom management and control (Kauffman, 1989). When students do exhibit challenging behaviour this factor appears to significantly increase the likelihood that a student's mainstream placement will be unsuccessful. Mundell (1993) presents examples of mainstream placements in New Zealand which have been unsuccessful, despite initially positive attitudes and support from school, community and SES. In all cases the placement broke down because of continuing disruptive behaviour by the mainstreamed student, particularly when this behaviour presented a physical risk to classmates.

The questionnaire data indicates that the possibility that mainstreamed students will present challenging behaviour is a significant concern for classroom teachers. The personal relevance of training activities is likely be increased if they includes strategies for dealing with problem behaviour. However, the case study results suggest that one aspect of this training should seek to place the issue of challenging behaviour in perspective and to reassure teachers that they will not necessarily encounter this problem. Kauffman (1989) suggests that the information needed by teachers would include a) an understanding of the variety of possible causal factors involved in students' challenging behaviour, b) that teachers should attempt to enlist the cooperation of parents in attempting to influence students' behaviour, and c) that teachers should be prepared to examine a student's present school environment to identify factors that contribute to the challenging behaviour and those which encourage desirable behaviour. Kauffman (1989) also suggests that teachers need to be aware that if they encounter challenging behaviour they may need to enlist the help of other professionals, such as school psychologists or liaison teachers. In New Zealand many of these professionals would be accessed through the SES. Training for mainstreaming should aim to familiarise teachers with the roles of these professionals and how to access them if needed.

Recognising Individual Needs

Recognition of the individual needs of mainstreamed students, production of objectives and goals relevant to those needs and accurate monitoring of progress towards these goals are all issues identified as important by case study respondents. These areas were not raised to any great extent at the first interviews, but by the end of the year most of the respondents expressed concern that they lacked sufficient information about the individual strengths and needs of their mainstreamed students and the intended goals of the placements. Over half of the respondents said their advice to other teachers new to mainstreaming would be to obtain detailed student profiles of the mainstreamed students and a clear indication of the mainstreamed students' goals from the Special Programmes department. Respondents pointed out that lack of knowledge of these individual goals resulted in their inability to plan effective programmes for the mainstreamed students, lack of objective evidence to confirm progress made by the mainstreamed students, and increase in teacher anxiety.

The notion that the importance of identifying individual needs and goals is not initially recognised by teachers, but becomes more apparent as teachers become more aware of issues to do with mainstreaming, is supported by the finding from the questionnaire survey that teachers with training for mainstreaming rate the "Meeting Individual Needs" factor as significantly more important than teachers who had no training for mainstreaming.

In order to be successful, mainstreaming must be based on the recognition of individual differences (Stainback, Stainback, Shevin & East, 1994) and structured around planned, systematic individualised programmes (Chapman, 1988). The results of this study indicate that teachers come to recognise the importance of these factors in mainstreaming either through their own personal experience in the classroom or through specific training for mainstreaming.

Cooperative Learning

Chapman (1988) also emphasises that mainstreaming, in order to better ensure success, needs to take place in cooperative learning contexts. Case study respondents recognised the appropriateness and usefulness of cooperative learning techniques and strategies in working with classes which included mainstreamed students. Even though the training that respondents received in cooperative learning was not directly aimed at

mainstreaming, respondents were able to appreciate its value for the mainstreaming situation. They were able to introduce cooperative learning strategies in their classes which included mainstreamed students. Over half of the case study respondents listed cooperative learning strategies to be among the techniques they had found to be most useful in working with classes which included mainstreamed students. In the questionnaire study, developing strategies for cooperative learning is one area of training comprising the "Classroom Management" Factor which teachers rated the highest priority.

Mainstreaming in Secondary Schools

Data from the case study interviews show that teachers encountered some of the problems specific to mainstreaming in secondary schools discussed earlier (e.g., Schumaker & Deshler, 1988). Teachers identified problems resulting from school organisation and from the wide gap between the performance of regular and mainstreamed students. Two respondents described situations where mainstreamed students became disoriented and confused by the room and timetable changes of their school week at stages in the school year when regular students had assimilated these changes effectively. Several respondents remarked on the difficulty of establishing an adequate level of communication between all teachers involved in teaching the mainstreamed students. Several teachers commented, also, on the inadequacy of the school's standard assessment and reporting systems when applied to mainstreamed students. Because of the differences in expectations and in the level of achievement of mainstreamed and regular students, these standard systems were reported to have been inappropriate to accurately measure and record the real level of progress made by the mainstreamed students.

The Support Role of Special Programmes Personnel

The results of this study and others suggest that classroom teachers accepting students with special educational needs into their classes are likely to have received little or no training to prepare them for mainstreaming. Moreover, due to issues of funding, time constraints and school or personal priorities, teachers are unlikely to have access to formal in-service training during the time in which they are involved in the mainstream placements. This appears to make the support role of the Special Programmes teachers highly significant to classroom teachers involved in mainstreaming, especially in the light

of the report that the SES no longer has sufficient resources to be able to train classroom teachers (SES slates cutbacks, 1993).

Several case study respondents expressed a desire to be able to work more closely with the Special Programmes teachers, although some appeared to be reticent to request support from the Special Programmes teachers whom they considered to be over-committed already. Interviewees identified a number of areas in which the Special Programmes teachers' support could be valuable. An important aspect of the Special Programmes teachers' role is that of building the confidence of the classroom teacher, reassuring them and helping them to overcome initial fears and anxiety. Special Programmes teachers can assist classroom teachers to develop teaching strategies and skills in adapting worksheets, activities and other resources. Case study respondents appeared to value greatly their Special Programmes teachers' feedback on lesson plans and resources, and several respondents reported that they had learned a number of useful strategies by watching the Special Programmes teacher work with the mainstreamed students and then modelling their own techniques on what they had observed.

Perhaps the most significant role of the Special Programmes department is to provide the classroom teacher with adequate information about the individual strengths and needs of the mainstreamed students and the goals and expectations for the placement. This is one area in which the Special Programmes staff did not appear to fulfil their responsibility for many of the case study respondents. More than three quarters of the respondents felt that they had not been provided with adequate information about the needs and goals of the mainstreamed students in their classes. Respondents identified the consequences of having insufficient knowledge about students' needs and goals. Without knowledge of a students' needs, they felt unable to effectively plan programmes to meet those needs; without knowledge of a students' goals, they were unable to evaluate the progress students might have made towards those goals. This situation might be seen as setting up both student and teacher for failure, or at best to be denying them both the opportunity to recognise their successes. It is perhaps a measure of the professionalism and commitment of the individual teachers in the case study that they persevered with the mainstreamed placements and were able to report considerable degrees of success by the end of the year.

Two possibilities are suggested as reasons for the failure on the part of the Special Programmes teachers to provide the necessary information to classroom teachers. One reason suggested by the case study interviews concerns the operation of the IEP process in the schools. The IEP is the process designed to facilitate the coordination and recording of information on student achievement, students needs, agreed goals and objectives towards which the students will work, and appropriate teaching programmes. None of the case study respondents reported receiving adequate feedback from their students' IEP meetings and one third of the respondents had no knowledge of their students' IEPs throughout the year. It is significant to note, however, that those respondents who were closely involved in students' IEPs recognised not only the value of the process, but also their own developing skills at participating in IEP meetings. If the IEP process provides the framework for the planned, structured individualised programmes on which mainstreaming should be based, the effectiveness of this process must surely be limited if details from the IEP are not disseminated to all teachers involved with providing education to the mainstreamed student concerned. Hence there is a danger that the mainstreaming process will become one of "maindumping" (Chapman, 1988, p. 131).

There is another possible reason why the Special Programmes teachers did not initially provide the classroom teachers with adequate information about the mainstreamed students being placed in their classes, and in some cases gave the teacher no prior indication that students with special educational needs would be in their classes. At the time of initial approaches to principals and mainstreaming coordinators the impression given by several schools was that the Special Programmes department placed students with special educational needs into regular classes, but did not deliver support until the teacher of that class requested it. The inference seemed to be that perhaps some teachers might feel they did not need support and information from the Special Programmes department. The evidence for this is anecdotal, since the significance of this issue was not anticipated at the time and was not pursued further. Further investigation of this issue may be warranted since there appears to be a suggestion that the Special Programmes departments of some schools may be inclining towards the "false image of homogeneity" warned against by Stainback, Stainback, East and Shevin (1994, p. 487).

CHAPTER 6: CONCLUSIONS, EDUCATIONAL IMPLICATIONS AND FUTURE RESEARCH.

The New Zealand Government has documented its commitment to increasing the level of mainstreaming in regular schools (Department of Education, 1987, 1988; Ministry of Education, 1993). By definition, the educational needs of mainstreamed students are exceptional, and regular schools and regular teachers must be equipped to meet these needs if they are going to deliver appropriate and effective education for mainstreamed students (Chapman, 1988). The necessity of regular teachers developing the skills to meet the needs of this wide range of students has been acknowledged by the Ministry of Education (1993).

This study provides further evidence to support the arguments, articulated by authors such as Capie (1987) and Hornby and Murray (1987), that classroom teachers in New Zealand require further training to prepare them for mainstreaming. Data from this study also suggests that classroom teachers feel the need of greater support from the Special Programmes teachers in their schools. Particularly, teachers feel they need better information about the strengths and needs of the mainstreamed students placed in their classes, and a clear indication of the goals and objectives set for the placements. There is also a suggestion that the IEP process, the educational tool designed to facilitate the collation and dissemination of this information, is not being used as effectively as it might be to convey this vital information to classroom teachers.

Future Research

The results of this study suggest the need of further investigation into the effectiveness of in-service short courses in providing training to prepare classroom teachers for mainstreaming. This study investigated classroom teachers' perceived training needs. Nevertheless, there is no guarantee that the training areas teachers identify as most important are necessarily the areas which will have the most significant effect upon their teaching skills and attitudes. Identifying training areas with the most personal relevance to teachers should enable training activities to be designed which are attractive to teachers. Training in some of these areas may have little effect on teachers' skills and attitudes, while there may be other significant training areas which teachers fail to identify.

Renaut suggests that only substantial programmes of training, such as those provided by Masters degrees or diplomas in special education, significantly improve the quality of programmes that teachers provide for exceptional students (J. Renaut, personal communication, January 17, 1995). However the survey results from this study show that teachers who had received training for mainstreaming had significantly different training priorities from teachers without such training. Both this study and that of Renaut describe interrelating data, neither demonstrate proven causal relationships. As an educational tool to impact on significant numbers of teachers, in-service short courses are far more practical than substantial training programmes which have far higher requirements in terms of individual cost and time commitment. There is a need for further research to investigate the effectiveness of short in-service courses to improve teachers' skills for and attitudes towards mainstreaming, and to investigate which aspects of content and design make these more effective. Previous studies have used various measures to assess the effectiveness of training, including self-reported attitude or assessment of competence (e.g., Harasymiw & Horne, 1976), observed classroom interactions (e.g., Brady, Swank, Taylor & Freiberg, 1988) and quality of special education programme (e.g., Renaut, 1994). In order to address the issues of effectiveness of in-service training it will be necessary to determine the most appropriate measure of effectiveness.

Further investigation of certain operational aspects of mainstreaming in secondary schools is also suggested by the results of this study. Case study respondents describe a number of aspects of school organisation which appear to jeopardise the success of mainstream placements. These include a) the failure of classroom teachers to be fully involved in the IEP process for mainstreamed students in their classes, b) unreliable dissemination of feedback from the IEP process to classroom teachers, c) lack of communication between all teachers involved in a student's timetable, d) standardised assessment and reporting systems which are inappropriate for exceptional students, and e) failure to predict that mainstreamed students might require more time or more support to achieve the levels of independence and autonomy normally expected of secondary school students. Finally, there appears to be some question regarding the basis on which some Special Programmes departments deliver support to classroom teachers. It is possible that in some schools teachers are not forewarned of students with special needs joining

their classes, and that Special Programmes departments wait until a teacher requests their assistance before becoming involved with a placement. In doing so, Special Programmes teachers would appear to be denying classroom teachers the opportunity to effectively prepare themselves for the placement by learning about the individual needs, strengths and goals of their mainstreamed students. Furthermore, teachers in the case study felt that the Special Programmes teachers in their school had heavy workloads, and this, at times, discouraged classroom teachers from requesting more support and time from the specialists.

It is important to remember that the operational concerns outlined above result from an investigation which concentrates on the point of view of the classroom teacher. The focus of this study was on the attitudes of classroom teachers themselves and on how they perceived their training needs. As such, external validation of these perceptions was considered unnecessary. However, this lack of external validation means that teachers' perceptions of the wider aspects of the mainstreaming process should be interpreted cautiously. Clearly, others involved with the Special Programmes departments or school administration, may have alternative explanations for the situations described above, which might place them in a different perspective. However, as teachers are pivotal in the process of mainstreaming, the issues they raise should be viewed as significant and should warrant further investigation from a wider perspective.

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Appendix A

Questionnaire: Training Priorities for Mainstreaming

Questionnaire : Training Priorities for Mainstreaming

I am conducting a study investigating the most important areas of in-service training that mainstream (i.e. not special education) teachers need to better equip them to teach a mainstream class which includes a student(s) with an intellectual disability. It would be very useful if you would take the time to answer the following questions and return the completed questionnaire to your ***school office*** *by* ***Friday 7th October.***

All responses will be treated with total confidentiality and to ensure this the questionnaire is designed to be completed anonymously; please do not indicate your name or the name of the school where you teach.

What subjects do you teach?_____

How many years teaching experience do you have?_____

Have you ever taught mainstreamed student(s) with intellectual disabilities? Yes ☐ No ☐

Have you received any specific training aimed at mainstreaming? Yes ☐ No ☐

If yes, please specify: ☐ Pre-service
☐ In-service
☐ Other_____

Please indicate beside each topic area below how you would rate the importance of that topic as an area of training for general education teachers to prepare them for mainstreaming. (1 =Low Priority, 5 = High Priority). If you do not understand what is meant by any particular item, please draw a line through that question.

		Low Priority	*High Priority*
1.	The legal and ethical issues of mainstreaming._____	1...2...3...4...5	
2.	Behaviour management strategies for behaviour problems.	1...2...3...4...5	
3.	Participating in team approaches to instruction._____	1...2...3...4...5	
4.	Translating research findings into classroom practice.....	1...2...3...4...5	
5.	Information on various disabilities, their nature, characteristics, terminology used. _____	1...2...3...4...5	
6.	Theories of assessment and information about formal tests available.....	1...2...3...4...5	
7.	Developing effective teaching/learning programs for specific problems.__	1...2...3...4...5	
8.	Understanding what to expect from various skill levels and what level of accomplishment an exceptional child can hope to achieve.	1...2...3...4...5	
9.	Assisting regular students to understand individual differences and accept exceptional children. _____	1...2...3...4...5	
10.	Devising informal tests and curriculum based assessment.	1...2...3...4...5	
11.	Selecting and developing suitable materials and equipment._____	1...2...3...4...5	
12.	Considering the full teaching/learning environment in evaluation and planning.	1...2...3...4...5	
13.	Effective use of classroom support staff (e.g. teacher aides, volunteers).__	1...2...3...4...5	

Please turn over

	Low Priority	*High Priority*
Pacing lessons and developing a range of activities to suit mixed ability classes.	1	2...3...4...5
Using goals and objectives to guide teaching techniques and adapting these if not working.	1	2...3...4...5
Knowledge of IEP (Individualised Educational Programmes) development, design and implementation.	1	2...3...4...5
The philosophy, history and rationale of mainstreaming.	1	2...3...4...5
Classroom observation and assessing the teaching/learning environment.	1	2...3...4...5
Access to and co-operative work with resource teachers and other specialist support.	1	2...3...4...5
Developing informal evaluation to monitor student progress and effectiveness of programs.	1	2...3...4...5
Developing a positive, supportive classroom climate.	1	2...3...4...5
How to involve the exceptional child without taking away from the rest of the class.	1	2...3...4...5
How to effectively utilize the IEP in the classroom.	1	2...3...4...5
Adjusting and adapting curricula to suit ability, needs and interest of exceptional children.	1	2...3...4...5
Developing strategies for co-operative learning and including the exceptional child into general class activities	1	2...3...4...5
Use of peer-tutoring, individual, small group and large group work.	1	2...3...4...5
Using effective questioning strategies at appropriate levels.	1	2...3...4...5
Using measures of student progress to guide modification of programs.	1	2...3...4...5
Promoting equity in the classroom in issues of race, gender, handicap, etc.	1	2...3...4...5
Maintaining clear routines, structure and consistent consequences in the classroom.	1	2...3...4...5
Incorporating objectives for socialisation into the curriculum (to promote independence, responsibility, social skills, etc.).	1	2...3...4...5
How to participate effectively in IEP meetings.	1	2...3...4...5
Collaboration and consultation with special education staff and other professionals.	1	2...3...4...5
Developing appropriate short term objectives and long term goals.	1	2...3...4...5
Developing tasks to suit a wide range of student ability and individual difference.	1	2...3...4...5
Self evaluation (monitoring consistency, lesson structure, effectiveness of questioning style, minimising negative interactions with students, etc.)	1	2...3...4...5
Communicating and collaborating with parents and whanau of exceptional children.	1	2...3...4...5
Team-work approaches, understanding roles and responsibilities.	1	2...3...4...5
Using task analysis to break down complex tasks into more achievable steps.	1	2...3...4...5

Thank you for your time.

Peter Shimman, Whitireia Community Polytechnic, Porirua

Appendix B

Case Study Interview Questions

Interview Questions, Initial Interview.

Age:
Gender:
Teaching Subject(s):
Years teaching:
Can you describe the situation for forthcoming mainstream placement (- subject, student(s), support expected, choice, other details
Have you planned to receive training for mainstreaming? (details)
Do you expect to receive training for mainstreaming?
Have you done any training re mainstreaming, special ed. before? (details-Pre-service? In-service? Other?
What do you see as your main training needs to prepare you for mainstreaming?
What particular concerns do you have about mainstreaming situation?
What are your general impressions about your mainstreaming situation? areas most confident about? areas least confident about?
(Complete questionnaire)
Any further comments arising from the questionnaire content?
How would your training needs best be met? What sort of course?

Interview Questions, Interview 2

Is the student(s) still in the mainstreamed placement in your class(es)?
If not please give details of changes. - how and why placement has been changed?
how decision was made? who made it?
how long the student was in your class?
where are they now, what alternative has been chosen?
Have there been any changes in the situation regarding in-class support, information, etc.

Training
Have you done any training re-mainstreaming since the last interview?
If so please describe.
What was the most valuable aspect of this training?
What was the least valuable aspect of this training?
Do you feel you have learned anything new about mainstreaming?
If so what?
How did you learn this?
What do you now see as your main training needs re-mainstreaming?

Placement
How is the mainstreamed student fitting into the class?
Is there social interaction between the mainstreamed student and the other students in the class? during class time? during lunch & break time, etc?
Do the other students accept or reject the mainstreamed student?
How is the mainstreamed student doing academically?
Do you feel you are meeting the mainstreamed student's needs?
(details of how or how not)

Have there been any memorable incidents (positive or negative) to do with the mainstream placement?
How generally do you feel the mainstream placement is going?
Is there anything which might improve the situation?
Is there one summarising anecdote or comment about the mainstreaming placement?

IEPs
Has the student had an IEP since the last interview?
Were you invited?
Did you attend?
Did you contribute to the IEP meeting or process?
What are your general impressions about the IEP process and outcomes?
Did your study at Teaching College include some study on IEPs?

Interview Questions, Final Interview

(Some of these questions may seem repetitive, if you feel you have already answered a question please feel free to say so).
Are the student(s) still in the mainstreamed placement?
Have you done any training for mainstreaming during this school year?
Have you asked for any?
Was any offered?
Describe how you feel the mainstream placement has gone this year.
How successful do you feel you have been at meeting the needs of the mainstreamed student(s)? (one to five score).
Would you take a mainstreamed student again next year?
What, with hindsight, would you have liked to have known or been shown told at the start of the year?
What have been the most important 'lessons' about mainstreaming that you have learned this year?
How did you learn them?
What of the skills and knowledge you already had proved to be most useful?
Where there any skills/knowledge that proved to be useful that you hadn't anticipated?
Did any issues or concerns arise that you hadn't anticipated?
Were there any issues, concerns or problems that you anticipated at the start of the year but which did not arise?
If someone else was in a similar position next year what would you tell them or show them?
If you were mainstreaming next year or in the future what would be you main training needs now?
What mistakes were made this year? (by you, organisationally, etc.)
What things have contributed most to the success of the mainstream placement?
What were the high points of the year?
Describe yourself, with respect to mainstreaming at the start of the year.
Describe yourself, with respect to mainstreaming at the end of the year.
What changes have happened and how?

Appendix C

Summaries of Case Study Interviews

Summary : Subject 1 (TM)

Subject TM is a 26 year old male in his first year of teaching. He is trained to teach Physical Education and Health but is teaching only Physical Education in his present post. TM is teaching at a Form 3 to 7 boys high school in Wellington. The school's roll is approximately 620.

TM has one mainstreamed third form student in his form class , whom he also takes for Physical Education twice a week. TM receives no in-class support, but has been advised to call on the special programmes teachers if a problem arises with the student. TM was not given a choice in the placement of the student into his class. He feels that if he had complained vehemently the student may have been removed.

TM has had no previous training related to special education or mainstreaming. In his Physical Education degree he chose not to take an option to study 'Special Physical Education', and there was no specific 'special' training available on his pre-service teacher training. He had worked part-time at an intermediate school for 2 years supporting a boy with behavioural difficulties. He received no special training for this but was in the class with another teacher most of the time. TM has not planned to receive in-service training related to mainstreaming this year and does not expect to receive any.

TM feels his main training needs to be in the area of teaching skills on multiple levels. He is concerned about spending a disproportionate amount of time with the mainstreamed student to the detriment of the rest of the class. He does not believe his mainstreamed student presents behavioural challenges, but feels that if he had a disruptive student in his class he would need training to help deal with the situation. TM is unfamiliar with the IEP process, although the special programmes teacher had provided him with information about the student's progress last year and his aims for the current year.

TM feels that the mainstreamed student in his class is learning to get on with others and to develop basic conversational skills, whilst the rest of the class are learning tolerance and patience.

TM's preference for in-service delivery would be via a short course.

Interview 2

The mainstreamed student was removed from TM's form class and PE class approximately two months into the first term and was placed into a smaller, lower-stream class. TM was informed about the change, but he was not involved in the decision-making. TM beleives the student was moved because it was judged he required too much teacher time, particularly in academic subjects.

TM feels the mainstream placement was worthwhile for the social interaction it provided, but he considers it had little academic value for the student. In the form class TM initiated a buddy system to support the mainstreamed student, with a classmate assigned to help the student complete important tasks. However, time constraints meant that helpers were doing things for the student rather than helping him to learn to do them for himself. TM feels limited form period did not allow him time to work with the mainstreamed student, hence TM feels he did not meet the student's needs.

TM feels the mainstreamed student had not yet settled down at school. The students frequently returned to TM's form room between lessons, seemingly unsure of where to go next. TM feels the buddy system may have been more effective later in the year when the student was better oriented to the school.

TM's initial concerns that the mainstreamed student would exhibit behavioural problems had not been borne out. TM had consciously worked to eliminate teasing by classmates, which he saw as being one-sided. It took him some time to realise the mainstreamed student sometimes initiated incidents himself.

TM feels the mainstreamed student was generally accepted by the class and there was good social interaction between them during classtime. The mainstreamed student now communicates more effectively and appears more confident. However the student had limited social interaction outside the class, spending most of his time with one other boy.

TM is expecting another student is to be mainstreamed into his PE and form classes. TM has received no training with respect to mainstreaming since the initial interview. TM does not feel he has significant training needs as his PE training included ways of working with students of different levels of ability.

TM had no knowledge of the student having had an IEP.

Summary : Subject 2 (LH)

Subject LH is a 24 year old, female in her second year of teaching. She teaches Social Studies, Drama and History at a Form 3 to 7 co-educational high school in a suburb outside Wellington. The school's roll approximately 970.

LH has two third form mainstreamed boys in her form class, who she also takes for Social Studies and Drama - a total of six times a week, sometimes three times in one day. She receives the support of one teacher aide for one period of Social Studies per week. LH has requested more, but will not know about this until allocation of staffing hours is settled. LH does not feel she needs in-class support for drama. She was given no choice in the placement of the mainstreamed student in her class.

LH feels her pre-service training raised an awareness of disabilities within the classroom, but did not deal adequately with associated practical teaching issues. She has asked for in-service training in relation to mainstreaming. The special programmes teachers at the school are very supportive and they are looking out for suitable courses or training events.

LH feels her main training needs to be developing skills in writing appropriate multi-level programmes to provide mainstreamed students with age-appropriate, interesting work related to the topic which the rest of the class is working on. She feels unclear about the IEP process and what is expected of her in IEP meetings. LH is aware there are a number of people with specialised roles but she is sometimes unsure about who to approach on specific issues.

LH's other concerns include ensuring that mainstreamed students get adequate attention and support. LH feels the class runs smoothly and vibrantly when the teacher aide is in there providing support. Without the teacher aide LH feels it can be disjointed because she has to re-explain instructions to the mainstreamed students. Also she is concerned that the mainstreamed students may not be supported outside of the class as well as they are during lessons.

LH is concerned about dealing with the parents of mainstreamed students. At present the special programmes teacher acts as an intermediary between LH and the students' parents. LH is concerned that if parents should feel dissatisfied with her work with their child that this dissatisfaction could affect the relationship between herself and the student.

LH enjoys having the mainstreamed boys in her class. She feels it is particularly good for her and the rest of the class to work with these students in a variety of lessons and to be able to see the range of their abilities.

LH's preference for training would be a short course with periodic follow-ups. She feels this would maintain her enthusiasm, allow evaluation and modification of programmes and strategies and also facilitate course participants building supportive contacts with each other.

Interview 2

Both students remain on placement in LH's form class. LH no longer teaches Social Studies to the class but continues to be form teacher for that class, in order to remain involved with the two mainstreamed students. There is a teacher aide to support the two students for every Social Studies period, though LH believes a likely reduction in the school's ancillary hours may reduce the teacher aide hours available for Social Studies.

LH feels the mainstream placements have generally been very successful. The mainstreamed students are accepted by their classmates and encouraged to ask questions and answer questions by their classmates. This has developed without LH having to manoeuvre it. There have been some incidents of teasing but these usually involve students from other classes. Out of class one student (T) is friendly with senior students, who look after him. The other student (J) spends time with his non-disabled twin brother. The two students also join in with sports when weather permits.

LH considers it is important to keep the mainstreamed students in the classroom with other students, rather than remove them to a separate classroom to work with their teacher aide as some teachers in the school do. She finds this frustrating as she feels it defeats the purpose of mainstreaming. In the Social Studies class there is limited social interaction between the mainstreamed students and their classmates as the two students and their teacher aide tend to sit together with their teacher aide.

LH feel the two students are making reasonable academic progress. She is following a co-operative learning course and has been able to use techniques from the course with the mainstreamed students. In particular, co-operative learning arrangments with groups and pairs have worked well. LH has found it easier to adapt lessons for the mainstreamed students when she has a clear understanding of the goals of the lesson for the whole class. She feels the structure provided by the co-operative learning course has helped this, the concept of building up a process through stages. LH believes she has been meeting the needs of the mainstreamed students increasingly successfully. She would have liked to have developed co-operative learning strategies further with the class but is now unable to, because she no longers teaches that class Social Studies.

LH has had no specific training about mainstreaming since the last interview. She would like training to improve her understanding of the "readability" of books and resources, to help her identify suitable resources which will extend the mainstreamed students.

LH feels she has a better knowledge of language related to mainstreaming and special education, enabling her to articulate ideas, issues and concerns. She feels she has gained through talking with the special programmes teacher, who has a good knowledge of suitable resources. The special programmes teacher has also helped LH to feel more confident in the mainstreaming situation.

LH recalls several memorable incidents. After the mid-term break in term 2, T had forgotten his timetable and returned to LH's classroom during the day, lost and distressed. LH feels badly about this since neither she nor the other students in the class had anticipated that T might need extra support. Another time, T talked copiously in class about a skiing trip his parents had planned. The other students were clearly envious but LH noticed that they seemed to accept his excitement and constant talk as innocent enthusiasm and did not tell him to 'shut up' as they might another students they judged to be bragging. One morning T missed the school bus and decided to walk to school. Because of busy roads his parents had not previously allowed him to walk to school. On this occasion he made the decision himself and walked to school successfully and safely, arriving excited and proud of himself. LH was very impressed by his taking the responsibility himself, which she sees as a sign of his growing up.

One student has had an IEP since the last interview. It was held after school and LH was unable to attend because of drama commitments. She spoke with the special programmes teacher prior to the meeting and passed on written notes. IEPs are usually held at lunchtimes or after school. LH feels the IEP process is useful, especially to meet parents and to better understand their

expectations for the student. She feels it is valuable to have IEPs each term as she is aware of the extent of changes in people during a term, including the teachers.

Summary : Subject 3 (MW)

MW is a 26 year old female who has taught for about 6 terms. This has not been continuous, but has been mainly relief teaching, with a break for maternity leave. She teaches English, Maths and Social Studies at a single sex girls school in central Wellington. The school's roll is 740 approximately.

MW has two mainstreamed students in her fourth form Social Studies class. She teaches this class four times a week for 50 minutes each period. The mainstreamed students have been in this class since the start of the year. MW has the support of a special programmes teacher for all of these periods. She feels very lucky to have this level of support, which is partly due to the co-incidence of these periods with free periods in the special programmes teacher's timetable. MW was not given a choice about taking mainstreamed students and was at first quite intimidated by the situation. She was not informed beforehand that mainstreamed students would be in any of her classes and only discovered this when meeting the class for their first lesson.

MW has not planned to receive training in relation to mainstreaming and has not seriously considered the possibility. She does not expect to receive any training. She does not think the school will initiate training when she has not requested it. MW feels there was nothing in her pre-service teacher training which helped prepare her for mainstreaming. She would welcome some in-service training, particularly if she knew her role would continue to involve teaching in a mainstreaming situation.

MW sees her main training needs to be in learning to develop resources which reflect the themes and topics that the rest of the class are studying , but which are suitable to the academic level of the mainstreamed students.

MW feels relatively confident about the situation she is in because she has adequate support from the special programmes teacher. If that support were to be withdrawn, she would be very concerned about the amount of attention and support she could offer mainstreamed students and feels they might not participate in the lessons.

MW feels there should be more done to support teachers with mainstreamed students. She would like more communication between the special programmes teacher and the classroom teachers, especially about the students' abilities, their disabilities and their goals and objectives. She has not seen the students IEPs and feels unclear about the direction she should take with these students.

MW's preference for training would be a block course of several days or a week with follow-up sessions, possibly once a month.

Interview 2

Two mainstreamed students remain in MW's class. Due to staff changes, there have been significant changes in in-class support, causing some disruption for students. At the start of the year the special programmes teacher had resigned and her place was filled by a reliever. A new permanent teacher ha recently been appointed. MW feels that the in-class support has been unsatisfactory as the special programmes teachers, who also support five other students with ESOL problem in the class, have not been reliable, sometimes missing a class or arriving late because of other responsibilities.

MW has had no training about mainstreaming since the first interview but feels she has learned from observing the way the special programmes teachers have adapted the work she has set for the class. MW now feels confident to make these adaptations herself, simplifying language and reducing the number of concepts dealt with in each worksheet. MW also now specifically considers the needs and abilities of the mainstreamed students when writing task sheets, which she did not do before.
MW feels one of her main training needs to be more knowledge about specific conditions that result in students having special needs. She feels she needs to know more about IEPs and how these can help her to understand students' individual needs and more about adapting resources.

MW feels the mainstreamed students are always involved in group activities in the class. MW arranges the class into mixed ability groups. She is following a course on Co-operative Learning and feels this has taught her some effective techniques. The most valuable aspect of this course has been maximising the use of a mixed ability class through the use of co-operative groups and pairs and having a much more active classroom. MW feels this results in a more socially active class, too. In the co-operative groupwork the students are often required to do presentations to the class and MW sees real achievement in the mainstreamed students doing their part in these presentations.

MW sends the special programmes teacher and the seven students she supports to another classroom for part of the period, due to the noise level.

Generally the mainstreamed students fit into the class well and the other students accept them, although the mainstreamed students are teased at times. MW feels that social interaction in the classroom between the mainstreamed students and their classmates occurs only when the students are organised into groups. There is a good level of social interaction outside of class, both girls having "non-special needs" friends.

MW feels that both students are making progress academically, although she feels she may have been underestimating the abilities of one of the students, having observed how the new special programmes teacher works with the student. MW feels she is now meeting the needs of the mainstreamed students far better than she was at the beginning of the year. She feels this is mainly due to the changes in her teaching as a result of the co-operative learning course. She feels it would be helpful if the special programmes teacher provided more guidance and prepared more resources and if they could work more closely together.

MW has no knowledge of either students having had an IEP. If they have been held, MW was not invited to attend or contribute.

Summary : Subject 4 (MS)

Subject MS is a 26 year old a male in his second year of teaching. He teaches Workshop Technology and Graphics at a Form 3 to 7, co-educational school in a suburb outside Wellington. The school's roll is 570 approximately.

MS has one mainstreamed student in his third form Woodwork class. The student has the chronological age of a fourth former. MS receives no in-class support. He does not recall being previously consulted about the student's inclusion in his class.

MS has not planned to receive any training in relation to mainstreaming and does not expect to receive any. He does not recall covering special education or mainstreaming in his pre-service teacher training.

MS would welcome any training on mainstreaming or special education, but particularly related to the issue of giving the mainstreamed student sufficient attention without taking away from the rest of the class. He would also like practical advice on preparing work that will occupy the mainstreamed student during the lesson. Because she requests his attention frequently, MS sometimes directs the mainstreamed student towards time-filling tasks. He is uncomfortable about this and would prefer to have more meaningful tasks or assignments prepared for her.

MS feels that he was not given sufficient information about the student's abilities, disabilities and specific areas to work on with her. He had not heard of the IEP process. He would have liked some advice on how to deal with the student's attitudes and the way she reacts to certain situations. He is happy to have the student in his class and is prepared to give her every opportunity she needs. However, he is also conscious of the extra demands such a student makes on his attention and time. He feels that a class containing a mainstreamed student should have fewer other students in recognition of these extra demands.

MW's preference for training would be a short course, especially if it included classroom observation of good mainstreaming practice and/or an assessment of his classroom teaching, similar to those done during pre-service teacher training. He questions whether he would have time to commit to on-going follow-up sessions.

Interview 2

One mainstreamed student is currently in MS's class and has been in three of the four modules MS has taught this year. This has caused some difficulties for MS because he has two projects which he uses with the module class, and the student would have been repeating one of them. Instead MS has devised an indivdiual project for her. There is still no in-class support though as the class is now smaller MS finds it easier to cope with the mainstreamed student. MS feels that the mainstreamed student has been placed in his module classes, rather than her having chosen to return.

MS is now generally happier with the way the mainstreamed student is fitting into the class and is accepted by the other students. There is social interaction between the mainstreamed student and the rest of the class. There is a personality clash between the mainstreamed student and another student and MS has to do some "refereeing". Some students do tease the mainstreamed student but others make an effort to help her. Outside of class the student had formed friendships with two other girls, though one of these girls has since left.

MS feels the student does not have the basic skills necessary to enable her to achieve in woodwork and he feels someone should have coached her in some pre-skills. Although her skills have improved, they are still well below that necessary to achieve at the level of the rest of the class. However MS respects her willingness to try things and he is prepared to spend time "fixing up" her work so that the finished item is of an acceptable standard. When the student brings her work to MS, he encourages her to continue a task herself before finishing it for her. Earlier in the year, when sent back to continue a task, the student would not return for 15 or 20 minutes but would spend little of that time on task. Now she will return after about 5 minutes, having worked most of that time. MS sees this as an improvement in her work habits, although it puts more demands on his time and attention. MS feels he is meeting the mainstreamed student's needs within the limits of the situation. He has explained to the student his expectations as to her behaviour in his class and has negotiated with her the amount of time he can give her. MS feels the student has responded to this and he has seen improvements in her work habits and behaviour. He feels she is enjoying the class and learning new skills.

A memorable aspect of the placement for MS concerns a change in the mainstreamed student's attitudes. At first she showed a racist bias and would not accept help from Maori or Pacific Island students. MS explained to her that these students' help could be useful to her and she is now prepared to accept assistance from them.

MS has done no training about mainstreaming since the previous interview. Nor has anyone approached him to offer advice or help. He would like to do some training that would provide him with some ideas of projects at a suitable level. MS feels he is learning to adapt projects towards the level suited to the student, but that what he has learned has been through trial and error.

The mainstreamed student had had an IEP the day before this interview. MS was invited. He was able to attend because the meeting coincided with a non-contact period, if it had not there would have been no class cover available to allow him to attend. MS had not had the purpose of IEPs explained to him and was unclear what the meeting was trying to acheive. MS found it difficult to discuss the student's progress frankly with the student and her mother present. He felt there were things the special programmes teacher and the SES personnel needed to hear, but which the student and her mother did not. Prior to the IEP two staff members from the SES had spent some time in the class observing the student. At the meeting they pointed out positive aspects of the placement. However MS feels that their help did not come as an offer of extra assistance or additional resources but in the form of suggestionsas to how he could solve problems, all requiring more time on his part. MS can see that there may be positive outcomes from the IEP process, but he did not feel positive about this IEP.

Summary : Subject 5 (TB)

TB is a 31 year old male in his first year teaching. He teaches Workshop Technology, Design Technology, Graphics and Design and English at a Form 1 to 7, co-educational school in Palmerston North. The school's roll is approximately 760.

TB teaches a number of students in various classes who receive extra support. These include one student mainstreamed into his third form English class and two in his fifth form Workshop Technology class. He does not have regular in-class support, but feels that he has not needed it so far in workshop classes. TB has worked with the special programmes teacher to re-write units and re-structure work. He believes that when he requires her in-class support, as for instance in computer work, this will be forthcoming. He was not given a choice in the placement of the mainstreamed students in his class.

TB does not plan to receive any training in relation to mainstreaming, mainly because his own training priorities are elsewhere. He plans to teach Technology when it is introduced in two years time and so his first priority is preparing for this. During his pre-service teacher training TB attended a two hour seminar on special educational needs, which he found dynamic and inspiring. He is aware, however, of the limitations of one 2 hour session. He also spent one day at a school in Levin where he observed a group of students from an attached unit using the workshop facilities. He was impressed by their motivation and satisfaction.

TB feels any training with respect to special needs or mainstreaming would be useful, particularly strategies for motivating students and assisting with basic skills such as reading, writing and spelling.

TB feels confident about his work with mainstreamed students. He feels that his preferred methods of teaching, which include co-operative groupwork and individual work for all students in the class, suit the mainstreaming situation. He monitors the interactions between the students and discourages 'put-downs' in his class. He feels the rest of the students are kind, considerate and accommodating to the mainstreamed students. Sometimes the mainstreamed students become involved in inappropriate social interactions and TB attempts to counsel them, to assist their personal development and communication skills.

TB's preference for training generally would be correspondence work, though he feels that training for mainstreaming might be better suited to a groupwork format. He is aware, however, of the demands on his time and the difficulty he would have arranging release time from classes, because no other teacher in the school is able to teach his subjects in his place.

Interview 2

The same students remain in the mainstreamed placements, although some have been temporarily withdrawn from the class because of behaviour problems. The school has been employing behaviour modification and assertive discipline techniques withTB's third form English class.

TB does not have regular in-class support with any of his classes, though on occasion the special programmes teacher has taught the class whilst TB has worked individually with one mainstreamed student, who uses a laptop computer. TB feels that he is developing a good relationship with this student, computer skills are improving. He feels that this situation has had a positive effect on the group dynamic of the whole class, especially as it makes it clear TB is

taking responsibility for working with the mainstreamed students, rather than passing the responsibility to someone else.

TB feels that some of the issues he identified at the previous interview have been dealt with, such as appropriate resources, such as getting the laptop computer for his students, and age-inappropriate behaviour. He feels the whole class has become more mature.

TB feels the mainstreamed students are accepted and tolerated by the rest of the class. The other students in the class had complained to TB that he expected different standard of them from that of other students. TB discussed the issues with them and they appear to understand the situation.

TB feels that other students interact with the mainstreamed students in the class. He feels this is not the case outside the classroom, where mainstreamed students appear to be outsiders to a certain extent. The student who uses the laptop computer has a friendship with another student who is also somewhat of an outsider. Their friendship appears to be founded on their shared interest in computers.

TB feels that the mainstreamed students in his class are making good academic progress. However he feels that he does not have a clear understanding of the expectations of these students and so feels he does not have a yardstick against which to measure their progress. TB feels he has a good understanding of the students' needs but does not have the time to address them all. However he places this within the context of the ordinary classroom, where he feels it is impossible to meet the needs of all students.

TB feels he spends a lot of time getting the mainstreamed students to join in the lesson, a situation created in part, he believes, by the fact that in some other teacher's lessons these students are "stuck in a corner". He believes in the concept of mainstreaming, but thinks it will take time to get it right. He feels that teachers need to work together to develop individual learning pathways for these students and to raise the level of expectations of them. The special programmes teacher has provided TB with some teaching materials. This has been useful because basic literacy teaching is not one of TB's skill areas, but he feels this is what some of his students require.

TB has done no specific training for mainstreaming but has had two days of general training because he is a first year teacher. One of these days was on co-operative learning, which he has tried in his classes and which he feels has worked well. He has been working on getting groups to work together and to eliminate students putting down the mainstreamed students or calling them names. He sees this as very important in getting the students accepted within the class.

The students have had IEPs since the last interview. TB filled in a form but was not invited to attend. The IEPs are co-ordinated by the special programmes teacher and TB does not see it as appropriate that he attend. He has not had a great deal of feedback from the meetings. Not having had much involvement with IEPs, TB has not been able to assess their value. He wonders whether the system serves the students' best interests or whether it is there to justify the continuation of the special programmes department. He feels that all students should have individual educational programmes with responsibility for their own learning.

Summary : Subject 6 (RJ)

RJ is a 38 year old female who has been teaching for about 17 years. She teaches Health and PE at a Form 3 to 7, co-educational school in a suburb outside Wellington. The school's roll is approximately 570.

RJ has the same mainstreamed student as MS (subject 4), a fourth form girl joining a third form Health class. This student joined the class in early March, about four weeks after the year had started. RJ was not given a choice in the placement and receives no in-class support.

RJ did some training with regard to special educational needs in her pre-service teacher training, but feels that it was so long ago that it is of little help now. She has attended courses about teaching PE to children with disabilities.

RJ is not sure at this stage what her training needs are. However, she feels that training would need to be practically oriented towards adapting activities and resources for use in the classroom. Previous courses which concentrated heavily on theory she judged to be of little of practical application in the classroom.

Although RJ is comfortable with the mainstreamed student, she is concerned about the extra time she has to devote to her, encouraging her and persuading her to attempt tasks. RJ feels that it is important that the other students in the class understand and accept the mainstreamed student and understand how they may assist her learning. RJ feels that some work to promote this should have been done with the rest of the class before the mainstream placement commenced She has not seen the student's IEP and does not know if she has one.

RJ's preference for training would be a short course of perhaps 2 or 3 consecutive days, delivered outside of school hours, preferably during the holidays or a weekend. She feels it is important that this happens early in the school year, perhaps in January before school begins, rather than taking place midway through the school year.

Interview 2

The original student (L) is still placed in the mainstream class and RJ also has two more third form students (T and G) mainstreamed into the same class. The students have been placed into PE because it is the only option for them in the particular timetable block. RJ was consulted about this. RJ has had no in-class support for this period. One student has a teacher aide assigned to him, but as the school has been trying to reduce the amount of time the teacher aide spends with the student, RJ was happy to cope in the situation without the additional support.

The two new mainstreamed boys, T and G, are generally accepted within the class and get on well with the other students, although G is big and has a tendency to bully. They play sports with the other students during breaks and lunchtimes and mix readily with their Maori cultural peers. RJ feels that the female student, L, lacks necessary social skills, particularly in terms of coping with teasing from other students. L responds to teasing in a negative way which usually inflames the situation. Outside of class, RJ feels, she tends to gravitate towards students who react to her in a negative way, perpetuating this kind of interaction.

T and G are achieving quite well academically. RJ feels they rate at 2 to 3 on her marking schedule, which is a scale of 5, 5 being highest marks. RJ feels that L could achieve at this level also but fails to do so due mainly to her lack of concentration. RJ feels she is meeting the needs of T and G, not of L whose main needs are for improved socialisation skills.

RJ also taught G and L in Health modules, where she found working in small groups to be very effective. Students were arranged into mixed groups, which changed every week. RJ found this helped students feel safe to talk about themselves and their feelings. G came to be comfortable in this situation and was able to speak freely. RJ tried this with L also but felt her poor socialisation skills prevented this working well.

RJ has done no training about mainstreaming. She feels she has learned a good deal through being involved with the students' IEPs, which she feels helps to focus the student and teacher on goals and expectations and are an opportunity to set agreed standards. She feels her main training needs to be in devising alternative programmes for students with special needs and in acquiring a greater knowledge of appropriate resources to offer these students.

All three students have had IEPs since the last interview. RJ had attended two of these, but had been unable to get to the third. They were held during the day and RJ feels cover would have been provided if needed, although she had been able to leave senior classes unsupervised to attend. All present at the IEPs are expected to contribute to the meeting, speaking on current progress and achievements and any arising issues to be dealt with. RJ believes it valuable for students and teachers to discuss in this way and she believes that hearing the students' views gives her the opportunity to adapt her methods to accommodate the student. At one IEP a students who had been on daily report stated that he did not feel this needed to continue. He was able to use the IEP meeting to negotiate discontinuation of daily report provided he write a weekly diary instead.

Summary : Subject 7 (VM)

VM is a 52 year old female who has taught for 17 years, with a maternity leave break after the first three.
She teaches English, Social Studies and History at a single sex girls school in central Wellington. The school's roll is approximately 740.

VM has two mainstreamed students in a third form Social Studies class. She has this class four periods per week, three periods of which she receives in-class support from the special programmes teacher. VM was not in post at the start of the school year, but joined in early March to cover the long-term absence of another teacher. She is not aware whether the class teacher was consulted prior to the placement of the mainstreamed students.

VM has had no previous training with respect to mainstreaming or special educational needs. She has not planned to receive in-service training in relation to mainstreaming and does not expect to receive any.

VM is not sure what form of training she might need, especially since she has a high level of in-class support. If, however, the special programmes teacher was unable to attend the classes, VM feels she would definitely need training. The areas she identifies as being important are adapting work to the appropriate level for the mainstreamed students, techniques to deal with problem behaviour and being involved in consultation and planning with specialist staff.

VM feels very confident in her ability to affirm the mainstreamed students in her class, to give them positive feedback, and to carry on the programmes initiated by the special programmes teacher in the one period a week that the teacher is not in the class. However she feels that she was not given detailed information about the students, their strengths and their goals. Because of this she feels she does not know the students as well as she would like and is not sure how they will react to some of the forthcoming class activities, such as role play, drama and spoken presentation.

She is also concerned at the lack of available time for the special programmes teacher and herself to work together and plan programmes. This results from both teachers being very busy with many other aspects of school. VM feels that time to allow co-operative planning ought to be an integral part of any mainstreaming programme.

VM's preference for training would be an on-going format. She attended a short course on using computers where participants were given tasks to do back at school which were evaluated in follow-up sessions at regular intervals. VM feels this was very effective and believes a similar approach would suit training in skills for mainstreaming.

Interview 2

The two mainstreamed students remain in VM's class. VM now has in-class support every period from the special programmes teacher and she is very happy with this situation. VM teaches at the same school at MW and so has had the same staffing changes as MW.

VM feels the mainstreamed students are accepted in the class and their contributions are acknowledged by the other students. However, social interaction between the mainstreamed students and the rest of the class tends to take place only when she engineers it. The other students do not choose to sit with the mainstreamed students unless they are put together in a group. There was one instance of a mainstreamed student being bullied by another student in the

class and the other student was eventually moved. VM sees this as being an isolated incident. She is not sure what social interaction the mainstreamed students have with other students at lunchtimes and breaktimes.
The mainstreamed students are at the bottom of the class academically but they work hard and produce well so their marks rank higher in the class. VM feels they are making definite academic progress.

VM has developed ways of working with mainstreamed students. For example she has modified her worksheets, adapting the language, creating shorter activities and having a wider range of activities so that students have more choice. She now includes activities like drawing, colouring and constructing patterns, which she used to regard as simply "fill-in" activities but now sees as being valuable for all students.

VM has not found it necessary to have techniques for dealing with problem behaviour. There has not been any problem behaviour except shyness. She has found small group work has helped her to work on this, especially in Drama.

VM feels she is meeting the mainstreamed students' needs as much as she is meeting the needs of any other student. She feels she could do more if she had more time to prepare separate resources for the mainstreamed students. She would appreciate more time to sit down before class with the support teacher and work on resources together. She found it useful to have a reliever in the class and to observe the different way she tackled things. VM feels she has also learned from observing the special programmes teacher and in particular seeing the expectations they have of the mainstreamed students. This has meant she has revised upwards her expectations of students' abilities in some cases.

VM has had no training on mainstreaming since the last interview. VM is comfortable teaching the mainstreamed students in the class with the support person present, but feels she would like some training in basic teaching techniques for situations where she is on her own in the class This would include techniques for teaching literacy skills.

VM feels that having the special needs teacher present in the room can sometimes create a barrier because she feels awkward about interacting with a special needs student when the support person is there for that.

Both mainstreamed students have had IEPs since VMs last interview and she attended both. She found them fascinating and valuable. She thought it was really special and exciting to have that group of people focused in for an hour on one student. She found it useful to listen to the other teachers and to the experts at these IEPs

VM will work only part time next term and will lose her current class to someone returning from maternity leave.

Summary : Subject 8 (JL)

JL is a 23 year old female in her first year of teaching. She teaches English and Typing at a form 3 to 7 co-educational school in the Hutt Valley. The school's roll is approximately 980.

JL has a sixth form student with intellectual disabilities mainstreamed into her fifth form Typing class. She also has a mainstreamed student in her fourth form English class. At the beginning of the year her third form English class also included two mainstreamed students, but these have since been withdrawn and take English in the school's Learning Resource Centre. JL receives no in-class support for any of these lessons, but feels the special programmes teacher monitors the progress of the students. It was the special programmes teacher's intervention that resulted in the two third form students being withdrawn from the English class. JL was given no choice in the initial placement of the mainstreamed students but was involved in the decision to withdraw the two third formers.

JL has not planned to receive training in relation to mainstreaming and does not currently expect to, although she would welcome such training. Her pre-service teacher training did not contain any training of this nature.

JL identifies two main training needs. She would like help in planning programmes and lessons to cater for a wide range of student abilities in a class. She would also like to understand the level of expectation a teacher should have for mainstreamed students. She is unsure whether these students should be expected to follow the same programme as the other students, what action to take if they fall behind and how to record their progress appropriately on school reports. She is concerned about the student in the Typing class who will be sitting the School Certificate examination at the end of the year.

JL's concerns about her situation reflect her uncertainty about the appropriate expectations for mainstreamed students. Because of this uncertainty she is finding the experience frustrating, disappointing and she believes that she is failing to deliver what the students need.

JL's preference for training would be an on-going format, concentrating on practical issues of designing individual programmes and planning class activities which would involve all students in the class, regardless of ability. She feels the experience of working with and talking to other teachers in a similar situation would be very valuable and suggests there should be the opportunity to observe good mainstreaming practice in another classroom.

Interview 2

The two students remain in the mainstreamed placements and JL still does not receive any in-class support. At first she was unsure whether the mainstreamed students were in the class for academic reasons or just social reasons and she was unclear as to appropriate expectations. JL now feels clearer about the purpose of the mainstream placements and in particular about the expectations she should have of students. She recalls an incident when the mainstreamed student in her typing class handed in his first assignment. JL was surprised by the standard of the work, she had not expected to be able to mark this to the same standard as the rest of the class's work. JL feels that this helped to raise her expectations of this student.

TJL feels the mainstreamed students are accepted by the class, although both students operate somewhat separately from the rest of the class. In typing this is caused partly by the fact that the student uses a laptop computer which add to his physical separation from the rest of the class. There is little opportunity for groupwork in typing. In the fourth form English class the

mainstreamed student is involved in groupwork but otherwise chooses to seat herself away from the rest of the class, even though this is her form class with whom she spends most of her class time. Outside of class both students tend to spend time with other students from the school's Learning Resource Centre.

Academically the student in the typing class is doing well. Initially JL was unsure whether to set him the same work as the rest of the class. She does do this now and marks it to the same standard as the rest of the class. JL feels he "shouldn't do too badly" in his School Certificate Typing, with a possibility of a pass. JL feels she is learning to meet this student's needs and is learning to manage time in the class to allow her to work individually with the mainstreamed student.

JL is still somewhat confused over the student in the English class, who seems to spend a good deal of class time on writing unconnected with the lesson topics. This apparently happens in other classes, too. This student is mainstreamed into regular classes at her own request. JL feels unclear of this student's needs and is therefore unsure whether she is meeting them.

JL has done no training with regard to mainstreaming, although as a provisionally registered teacher she has done some in-house training about mixed ability teaching. She found the most useful thing about this training to be the opportunity to discuss the issues with other teachers. She found it reassuring to discover that she was not the only one in her situation and that there were others who also felt somewhat out of their depth. The most useful concept from the training session she felt to be that of not lowering one's expectations for students with special needs.

JL does not believe that either of the students has had an IEP since the last interview. She does not know when they might be held in the future. She has not seen records from the students' previous IEPS.

Overall, JL feels less of the frustration and disappointment she felt at the beginning of the year. At first she felt it to be her personal responsibility that the students weren't achieving to the level of the rest of the class and that this would reflect on her professional standing in the school. She now understands that the situation is similar in other classes and that she will not be held personally culpable. "It's not my fault".

Summary : Subject 9 (TS)

TS is a 34 year old male who has taught for ten years. He teaches Geography, Tourism Studies and Social Studies at a form 3 to 7 co-educational school in the Hutt Valley. The school's roll is 980 approximately.

TS's third form Social Studies class includes three mainstreamed students. This is also his form class. He was consulted about having these students in his class at the end of last year. He receives no in-class support, although there is a teacher aide available. TS believes that if he requests this support he will receive it, if the periods requested co-incide with available periods on the teacher aide's timetable. The special programmes teachers also offer informal support and assistance.

TS has not planned to receive training in relation to mainstreaming and has not requested any training. He feels he should have some but recognises that the school's priorities are placed elsewhere. TS has had no training with respect to mainstreaming or special educational needs, but several years ago, under a different regime, he was obliged to spend one period a week working on a programme of oral skills with a group of students in the school's Learning Resource Centre. He feels he was inadequately prepared for this and found it difficult, but feels it was valuable experience which helped him to understand the role of the Learning Resource Centre and the needs of the students placed there.

TS identifies his main training needs to be in areas of developing appropriate resources within the social studies syllabus, dealing with age-inappropriate social interactions between mainstreamed students and between these students and other students in the class, using support people from special agencies and other external sources and IEP development.

TS sees one benefit of mainstreaming to be the socialisation within the main social environment. TS is aware of the social isolation that results from students being withdrawn into the Learning Resource Centre. He believes that it is important to keep students in mainstream classes as long as possible. TS feels that dealing with the parents of mainstreamed students can be difficult but the special programmes teachers generally act as intermediaries between parents and classroom teachers.

TS feels the size of his class (28) is too large for him to be able to give adequate time to the mainstreamed students. He believes that the class was planned on the expectation that the three mainstreamed students would eventually be withdrawn, leaving a class of 25. He believes that some very able students were included in the class to compensate for the mainstreamed students. He finds that this exacerbates his problems because it makes the range of abilities even wider.

TS's preference for training would be a short course followed by two single days at intervals. He feels that this would allow time initially to discuss issues and develop resources and then to come back and evaluate the resources and programmes after they had been trialled in the classroom. He regards this follow-up as very important. He values the opportunity to meet and share with other teachers in similar situations.

Interview 2

The mainstreamed students remain in TS's form class and Social Studies class. These students have been removed from Maths and English classes and now take these subjects in the Learning Resource Centre. This move was largely at the request of the teachers involved, though in one case it was at the request of the student himself who told the teacher he was not coping with the

work and wished to be moved. TS still has no in-class support, but it would be available to him to him if he requested it.

TS feels the mainstreamed students fit into the class extremely well. Two of the mainstreamed students have good social interaction with the rest of the class. A third is quieter, although she takes part in class activities. TS feels the mainstreamed students' contributions are accepted by the class. However, as they spend more time on Learning Resource Centre activities, he feels they tend to become more insular.

Two of the mainstreamed students are doing well academically, improving their writing skills, comprehension skills and social studies content. TS feels he is meeting their needs. A third student is less able and though TS feels he is meeting her social and pastoral needs, he is less sure about her academic needs. He feels he needs to use task breakdown with her more.

TS has been using groupwork, putting each of the mainstreamed students in a different group with other supportive students. He feels the other students in the class have been very good at supporting the mainstreamed students and allotting them appropriate tasks within the group. The class seems to have done this naturally, with no direct instruction from TS. He encourages the more able students to assist the less able.

TS had been concerned about how to deal with age-inappropriate social interactions, but this has not arisen. He feels he initially expected social behaviour equivalent to learning age, but he now sees this is not always so. His expectations of the mainstreamed students have been raised, in part from observing the students' performance. When the class organised a fundraising sale, the three mainstreamed students did well and sold more than most of the other students. He had thought the mainstreamed students would need a lot of support, for example with counting the money, but they proved to be quite independent. TS believes this behaviour impressed the rest of the class.

One of the less able students sang at a talent quest in front of the whole school and was well received by the audience. TS feels this was an example of the mainstreamed students educating the rest of the school to the fact that students with special needs have abilities too. He does not feel this would have been the school's reaction five years ago and feels they would have been far less receptive and appreciative.

TS has had no training in mainstreaming since the last interview. He would like some professional development on IEPs and developing individualised programmes. He would like to work with the Learning Resource Centre staff to develop appropriate resources for Social Studies, but finds it is not really feasible because of time constraints. TS feels he has learned from meetings with parents, SES staff and staff from the Learning Resource Centre. The meetings had been set up to reassure parents but TS had also found them useful. He has a better understanding of breaking tasks down and the use of a step-by-step process.

TS believes there has been an IEP for one of the students since his last interview. He feels all three of the students should have one. He is unclear whose responsibility it is to initiate the IEP - his, the form teacher's or the Learning Resource Teacher's. The IEP in this case was initiated by the Learning Resource Teacher, he believes because of concern from the student's mother. TS attended the IEP and contributed ideas. He feels IEPs are useful, but is concerned about time constraints and would like there to be teachers with responsibility for IEPs. He sees IEPs as being useful for the most able students also. TS feels it would be difficult to get school time allocated for IEP meetings. He feels the school outwardly supports the lower ability students, but time is not made for IEPs.

Appendix D

Table Summarising Information from Interviews

APPENDIX D: TABLE SUMMARISING INFORMATION FROM INTERVIEWS

Case Study Interviewees	**TM**	**LH**	**MW**	**MS**	**TB**	**RJ**	**VM**	**JL**	**TS**
Sources providing strategies or techniques found by the interviewee to be valuable for mainstreaming	None reported	100 hour cluster course on cooperative learning.	100 hour cluster course on cooperative learning. Working with Special Programmes Teacher.	None reported	Working with Special Programmes Teacher Training on mixed ability teaching and cooperative learning as part of school's support programme for first year teachers.	Attendance at IEP meetings	Working with Special Programmes Teacher.	Training on mixed ability teaching and cooperative learning as part of school's support programme for first year teachers.	Attendance at IEP meetings
Interviewees' Perceived Training Needs									
Identified at Initial Interview									
Preparing appropriate resources and materials related to class topic	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Strategies and skills for mixed ability teaching	Yes	Yes	No	No	No	Yes	No	Yes	No
Strategies for dealing with challenging behaviour	Yes, although later in the year TM felt this had not been needed.	No	No	No	No	No	Yes, although later in the year VM felt this had not been needed.	No	Yes, although later in the year TS felt this had not been needed.
Understanding specialist roles, collaborating with specialists	No	Yes	No	No	No	No	Yes	No	Yes

APPENDIX D: TABLE SUMMARISING INFORMATION FROM INTERVIEWS (CONTINUED)

	TM	LH	MW	MS	TB	RJ	VM	JL	TS
Individualised Educational Programming	No	Yes	No	No	No	No	No	No	Yes
Other	Meeting mainstreamed students' needs without taking away from rest of class			Meeting mainstreamed students' needs without taking away from rest of class	Motivating mainstreamed students. Teaching basic literacy skills			Understanding expectations appropriate to mainstreamed students	
Identfied at end of year									
Preparing appropriate resources and materials related to class topic	No	Yes	Yes	Yes	No	Yes	Yes	No	No
IEP development and effective use of IEPs in the classroom	No	No	Yes	No	Yes	Yes	No	No	Yes
Understanding and catering for students' individual needs	No	Yes	Yes	No	No	No	No	No	Yes
Information on specific disabling conditions and related problems	No	Yes	Yes	Yes	No	No	No	No	No
Monitoring progress of mainstreamed students	No	No	No	No	Yes	Yes	Yes	No	No
Adapting programmes, lesson plans and teaching strategies for mainstreaming	No	Yes	Yes	No	No	No	No	No	Yes

APPENDIX D: TABLE SUMMARISING INFORMATION FROM INTERVIEWS (CONTINUED)

	TM	LH	MW	MS	TB	RJ	VM	JL	TS
Other			Understanding expectations appropriate to mainstreamed students. Teaching basic literacy skills				Strategies for including mainstreamed students into class activities		Developing appropriate goals for mainstreamed students
Preferred mode of delivery of training for mainstreaming	Short course	Short course plus observation of teaching and feedback from expert	Short course	Short course plus observation of teaching and feedback from expert plus observation of good practice	Correspon-dence study	Short course plus observation of good mainstreaming practice	Short course	Short course plus observation of good mainstreaming practice	Short course
Interviewees' Perceived Success of Placements									
Placement perceived to be successful	No. Mainstreamed student isolated, bullied and rejected leading to negative effects of confidence and social skills	Yes. Mainstreamed students made progress socially and academically	Yes. Mainstreamed students made progress socially. Difficult to assess academic progress due to lack of objective measures	Yes. Mainstreamed student made progress socially, academically and in work habits	Yes. Mainstreamed students made progress socially, and in work habits. Difficult to assess academic progress due to lack of goals and objective measures	Yes. Mainstreamed students made progress socially and academically	Yes. Mainstreamed students made progress socially and academically	Yes. Mainstreamed students made progress socially, academically and in work habits. Difficult to assess progress for 3rd form student due to lack of objective measures	Yes. Mainstreamed students made progress socially, academically and in work habits. Difficult to assess academic progress due to lack of stated goals and objective measures

APPENDIX D: TABLE SUMMARISING INFORMATION FROM INTERVIEWS (CONTINUED)

	TM	LH	MW	MS	TB	RJ	VM	JL	TS
Perceived success at meeting mainstreamed students' needs	Not successful. TM felt this was partly due to his being a first year teacher and therefore still developing his technique	Moderately successful, improved as year progressed	Initially not successful, far more successful by end of Term 2	Reasonably successful, felt student's needs were met much better in module with Teacher Aide	Successful, but TB felt that class size prevented him from being able to give students sufficient individual attention	Felt far more successful as year progressed	Reasonably successful	Very successful with 5th Form Typing student. Less successful with 3rd form English student.	Moderately successful. TS felt class size meant he was unable to spend sufficient time addressing individual needs
Interviewee willing to take mainstreamed students in the future	Would be far more cautious about accepting mainstreamed students in the future	Yes. Keen to do so. Also keen to develop skills in teaching Drama to students with special needs	Yes.	Yes.	Yes. Keen to do so	Yes.	Yes. Keen to do so	Yes.	Yes.
Degree of social interaction in class	Interaction in form class good. When mainstreamed student was moved to a lower stream class, he was not accepted and was bullied. Two students were accepted well in TM's PE class.	Mainstreamed students accepted by classmates. Social interaction limited.	Mainstreamed students accepted by classmates. Social interaction only when engineered by teacher in groupwork situations.	Mainstreamed student accepted by classmates. Social interaction limited.	Mainstreamed students accepted by classmates. Social interaction limited.	One student not accepted at first, but an attitude change on her part resulted in her becoming more accepted by classmates. Good level of social interaction.	Mainstreamed students accepted by classmates. Social interaction only when engineered by teacher in groupwork situations.	Mainstreamed students accepted by classmates. Social interaction only when engineered by teacher in groupwork situations.	Mainstreamed students accepted by classmates. Good level of social interaction.

APPENDIX D: TABLE SUMMARISING INFORMATION FROM INTERVIEWS (CONTINUED)

	TM	**LH**	**MW**	**MS**	**TB**	**RJ**	**VM**	**JL**	**TS**
Degree of social interaction outside class	Limited	Limited	Good	Limited	Limited	Good	Not known	Limited	Limited
Bullying incidents occurring	Yes	Yes	None reported	None reported	None reported	None reported	Yes	None reported	None reported
Interviewee reported good level of support and encouragement given by classmates	Yes (for the two students who joined PE class)	Yes	No	No	No	No	No	Yes	Yes
Factors Seen as Contributing to Success of Placement	Support given by classmates	Character and effort of mainstreamed students themselves. Support given by classmates. Support of Special Programmes Department	Interviewee became more aware of mainstreamed students' needs and changed teaching style to involve mainstreamed students more	Character and effort of mainstreamed students themselves. Support of Special Programmes Department	Regular classmates presented as role models, encouraging mainstreamed students to work to higher standards	Interviewees willingness to praise students when achieving and to counsel and negotiate with students when not achieving	Character and effort of mainstreamed students themselves. Support of Special Programmes Department	Support given by classmates	Character and effort of mainstreamed students themselves. Support given by classmates. Support of Special Programmes Department. Interviewee's class management skills and ability to relate to students
Interviewees' Changes of Attitude Over Year									
Reported at Initial Interview									
Comfortable with mainstreaming situation	No	Yes	Yes, with in-class support	Yes	No	Yes	Yes, with in-class support	No	No
Felt they had been inadequately prepared for mainstreaming	No	Yes	Yes	No	No	No	Yes	Yes	No

APPENDIX D: TABLE SUMMARISING INFORMATION FROM INTERVIEWS (CONTINUED)

	TM	LH	MW	MS	TB	RJ	VM	JL	TS
Described some feelings of anxiety over placement	No	No	No	No	No	No	"Fear of the unknown"	Worried and stressed	Keen, but uncertain of his ability to cope in the situation
Other	Remarked on positive opportunities for mainstreamed students and on benefits for other students	Remarked on benefits for other students		Remarked on positive opportunities for mainstreamed students			Remarked on benefits for other students. Confident in ability to affirm mainstreamed students and provide positive feedback		Remarked on positive opportunities for mainstreamed students. Confident in using cooperative groupwork in mainstreaming situation
Changes reported during year									
Initial anxiety or uncertainty had decreased over the year	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Yes
Other	Enthusiasm for mainstreaming had lessened over the year			Initial belief in mainstreaming reinforced. Recognised value of in-class support	Initial belief in mainstreaming reinforced. Recognised the importance of understanding individual needs and monitoring progress of mainstreamed students	Recognised value of establishing clear goals for mainstreamed students. Recognised value of regular meetings and feedback			

APPENDIX D: TABLE SUMMARISING INFORMATION FROM INTERVIEWS (CONTINUED)

	TM	LH	MW	MS	TB	RJ	VM	JL	TS
Highlights of the Year									
Opportunity to share in mainstreamed students' sense of achievement and growing confidence	Not reported	Yes	Not reported	Yes	Yes	Yes	Yes	Yes	Yes
Other		Seeing mainstreamed students using social strategies they had been taught			Seeing mainstreamed students using social strategies they had been taught			Special Programmes teacher's approval	Seeing other students in class recognising mainstreamed students' skills
Skills and Strategies Found to be Useful for Mainstreaming									
Strategies using cooperative groups and pairs	Not reported	Yes	Yes	Not reported	Yes	Yes	Not reported	Not reported	Yes
Counselling and negotiating skills	Not reported	Not reported	Not reported	Yes	Yes	Yes	Not reported	Not reported	Not reported
Use of buddy system	Yes	Yes	Not reported	Not reported	Not reported	Not reported	Not reported	Not reported	Not reported
Existing Skills and Knowledge Found to be Most Useful for Mainstreaming									
Being a supportive teacher students could relate to	Not reported	Yes	Not reported	Yes	Not reported	Yes	Not reported	Not reported	Yes
Patience and understanding	Not reported	Not reported	Not reported	Not reported	Yes	Yes	Not reported	Yes	Not reported
Other		Understanding the purpose of mainstreaming. Ability to generate a class climate of acceptance				Counselling and negotiating skills	Good classroom management skills. Mobile teaching style	Flexibility. Ability to explain things clearly	Groupwork skills

APPENDIX D: TABLE SUMMARISING INFORMATION FROM INTERVIEWS (CONTINUED)

	TM	LH	MW	MS	TB	RJ	VM	JL	TS
Advice to Other Teachers Involved in Mainstreaming									
Get clear indication of mainstreamed students' goals from Special Programmes Department	Yes	Yes	Yes	No	No	Yes	No	Yes	No
Ask for assistance (e.g. in-class support) if mainstreamed student failing to meet goals	Yes	No	No	Yes	No	Yes	No	No	No
Treat all students in class equitably and have same expectations of behaviour for all	No	No	No	Yes	Yes	No	No	No	Yes
Establish contact with parents of mainstreamed student	No	Yes	No	No	No	Yes	No	No	No
"Don't worry"	No	No	No	No	No	No	Yes	Yes	No
Other		Develop own resources. Attend IEP meetings				Seek ideas from other teachers			Design group activities to which mainstreamed students can make a meaningful contribution. Involve mainstreamed students in class activities as soon as possible.

Appendix E

Table Summarising Information from Interviews Regarding Procedural Issues

APPENDIX E: TABLE SUMMARISING INFORMATION FROM INTERVIEWS REGARDING PROCEDURAL ISSUES

Case Study Interviewees	**TM**	**LH**	**MW**	**MS**	**TB**	**RJ**	**VM**	**JL**	**TS**
Goals and Expectations									
Had received sufficient information and details of student goals for placement	No	Yes	No	No	Yes	No	No	No	Yes
Had received sufficient information about individual strengths and needs	No	No	No	No	Yes	Yes	No	No	No
Unable to plan programmes to help student achieve goals due to lack of clear goals and expectations	Yes	Not reported	Not reported	Not reported	Not reported	Yes	Not reported	Yes	Not reported
Individualised Educational Programmes									
Had seen IEP records (current or previous) at time of initial interview	No	No	No	No	No	No	No	No	No
Familiar with concept of IEP at initial interview	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Attended IEP meetings throughout year	No	Yes	No	Yes	No. Sent written reports to IEP meetings via Special Programmes teacher.	Yes	Yes	No	Yes
Found IEP meetings useful	Not applicable	Yes	Not applicable	No	Not applicable	Yes	Yes	Not applicable	Yes

APPENDIX E: TABLE SUMMARISING INFORMATION FROM INTERVIEWS REGARDING PROCEDURAL ISSUES (CONTINUED)

	TM	LH	MW	MS	TB	RJ	VM	JL	TS
Received clear feedback (goals, objectives, suggested adaptations to strategies) from IEPs	No	No	No	No	No	No	No	No	No
Assessment and Monitoring Progress of Mainstreamed Students									
Experienced difficulties in monitoring progress of mainstreamed students	Not reported	Not reported	Yes	Not reported	Yes	Yes	Yes	Yes	Not reported
Monitoring progress of mainstreamed students identified as an ongoing training need	No	No	No	No	Yes	Yes	Yes	No	No
Concerns Expressed About Placement									
Reported at Initial Interview									
Concerned that mainstreamed student would require a disproportionate amount of attention	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Would have liked more detailed student profiles	No	No	Yes	Yes	No	No	Yes	Yes	No
Expressed concerns about communicating with parents of mainstreamed students	No	Yes	No	No	No	Yes	No	No	No

APPENDIX E: TABLE SUMMARISING INFORMATION FROM INTERVIEWS REGARDING PROCEDURAL ISSUES (CONTINUED)

	TM	LH	MW	MS	TB	RJ	VM	JL	TS
Reported at end of year									
Would have liked to have worked more closely with Special Programmes Teacher	No	No	Yes	No	No	No	Yes	No	No
Would have liked more details on individual strengths and needs of mainstreamed students	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Would have liked more work done with other students in school to facilitate success of mainstream placements	Yes	Yes	No	No	No	Yes	Yes	No	No
Would have liked more time in classes to adequately address mainstreamed students' individual needs	No	No	Yes	Yes	No	No	No	No	Yes
Recognised the need for systematic monitoring of mainstreamed students' progress	No	No	No	No	Yes	No	No	Yes	No
Recognised the need for greater level of cooperation between all teachers involved with a mainstreamed student	No	Yes	No	No	No	Yes	No	No	No