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***Pre-Service Education in Teaching  
Children With Special Abilities at  
Primary School Level***

***A thesis presented in partial fulfilment of  
the requirements for the degree of  
Master of Education  
at  
Massey University***

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## ***Abstract***

This study explored a variety of ways in which student teachers were being educated to teach children with special abilities ( CWSA ) in primary schools. It also considered factors and rationales which guided or limited the provision of courses in regard to these children.

A survey of current provisions in New Zealand was carried out. Questionnaires were sent to six Colleges/Schools of Education and follow-up interviews were conducted at three of them. A search of the literature combined with personal correspondence sought specific examples of provisions overseas. Information was gathered on :

- New Zealand courses which educated students about CWSA
- rationales guiding these courses
- factors limiting the provision of courses on CWSA
- specific examples of overseas courses

The study found that individual Colleges/Schools of Education in New Zealand teach students about children with special abilities in differing ways. Some staff considered it appropriate that students learn about this topic in the context of discussing individual differences. Others believed in the need to focus more specifically on children with special abilities. Rationales guiding the provision of courses mainly centred on the need for student teachers to learn how to cater for children with special abilities in mixed ability classrooms. Limitations to how much time could be devoted to doing this were mainly attributed to ever-increasing demands to include new areas of content, in primary pre-service programmes.

CWSA courses in New Zealand had much in common with courses provided overseas. They were generally short-term and optional, were similar in content and placed near the end of training programmes. Practical teaching components featured more in the overseas courses.

Information from this study was combined with information from the literature review in order to critically evaluate how, and to what degree, pre-service education on children with special abilities could be delivered to students.

Principles of sound practice were formulated. These principles related to programme structure, course content and delivery and the importance of including a consideration of the needs of children with special abilities in pre-service programmes.

Based on these principles, recommendations were made for future practice and further research. They included ongoing professional development, evaluation of the effects of differing pre-service provisions on classroom practice, and the need for research to ascertain how teachers can best be trained in recognising and catering for Maori children with special abilities.

The conclusion drawn from the research was that all students should receive education about teaching children with special abilities. Presently in New Zealand the amount they receive is small. In particular, emphasis on practical experience with children with special abilities is limited. However, there are encouraging signs such as increasing interest shown by students in undertaking CWSA courses and enthusiasm of some staff members within Colleges/Schools of Education to provide further courses on the topic.

## ***Preface and Acknowledgments***

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I am grateful for the support shown by College/School of Education principals and staff members who circulated and completed questionnaires.

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I am grateful to all those people who supported and encouraged me. I hope that the study provides useful information to assist in providing student teachers with a sound understanding of children with special abilities.

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# **Chapter 1: Introduction**

## ***Rationale and Research Questions***

The purpose of this study was to explore the ways in which an understanding of catering for children with special abilities could be introduced to student teachers in primary level pre-service education programmes. The research was undertaken in an endeavour to address the issue of limited provision of courses on children with special abilities at this level in New Zealand.

Since 1989, with the advent of the Tomorrow's Schools reforms ( Lange, 1988 ), there has been growth in provisions in many New Zealand schools for children with special abilities ( also known as gifted and talented children ). Specific programmes for these children have increased and budgets for them allocated; written policies on children with special abilities are being developed ( McAlpine, 1992; Moltzen, 1993 ).

Some growth has also occurred in courses at the pre-service level, but in general they are short-term and optional ( McAlpine, 1992 ). Because schools are increasingly providing for gifted students mainly in regular mixed ability classrooms ( McAlpine, 1992 ), all graduating teachers need to emerge from training courses with some knowledge in this area. As Reid (1993 ) comments, this is not the case at present because many trainees do not participate in the limited number of courses offered, and leave College *with little notion of how to identify, stimulate, and extend the gifted children they will undoubtedly meet when they take charge of their first classes* (p9).

In attempting to address the problem situation of limited pre-service education on children with special abilities, this research sought information on current provisions in New Zealand and overseas. It addressed the overall question of :

In what ways can an understanding of teaching children with special abilities be introduced in pre-service programmes for prospective primary school teachers?

The specific research questions were :

1. What provisions exist currently in New Zealand?
2. What rationale, philosophy or research base guides these provisions ?
3. What factors limit the type and amount of provision?
4. What are some examples of provisions overseas?
5. What suggestions can be made for future directions in New Zealand ?

A self-administered questionnaire and some follow up interviews were used to survey the main providers of pre-service education in New Zealand. Literature searches and personal correspondence sought specific instances of training programmes overseas. Examples from Australia, U.K. and U.S.A. were drawn upon to ascertain what they offered New Zealand in terms of directions for pre-service education. Overseas models cannot be transferred directly, without adaptation, to the New Zealand setting, due to differing education systems within schools and teacher training institutions. However, as is the case in New Zealand, teachers in Australia, U.S.A., and U.K. are trained in initial teacher education to cater for all levels of ability ( Braggett, 1990; George, 1992a; McAlpine, 1992; Tomlinson et al, 1994 ). Graduate qualifications are then available, particularly in the U.S.A., to those who wish to specialise in teaching gifted children ( Clark, 1992 ).

The ways in which teachers are trained in the four countries focused on in this study, are outlined below.

In New Zealand there are six main providers of pre-service education for primary school teachers ( five Colleges of Education and one University ). Some students are enrolled in a three year Diploma in Teaching programme; others in a four year B.Ed course. Students in Colleges are often enrolled simultaneously in a College and a university, with some studying for three years at College and for a final year at university. Periods of teaching

practice in schools are an integral part of the training programme ( Renwick & Vize, 1993 ).

In Australia, teacher education is carried out mainly in universities and in some Colleges of Advanced Education. Training is of three or four year duration, with the fourth year B.Ed being undertaken directly following the Diploma in Teaching, or after beginning teaching. Practical experience in schools is part of the training ( Tisher, 1990 ).

In the U.K., teachers are trained in universities, polytechnics and colleges in a four year course which includes school experience, and leads to a B.Ed or B.A(Ed) ( McNamara, 1990 ).

In the U.S.A., teachers are trained in a variety of higher education settings, mostly in schools, colleges and departments of education within universities, and student teachers graduate with a degree ( Zimpher & Howey, 1990 ).

## ***Definition and Explanation of Terms***

While the term *children with special abilities* is widely used in New Zealand primary schools, *gifted and talented* is the terminology used in most overseas literature. In this thesis, the terms are used synonymously.

Although there are many differing definitions, it is possible to analyse general changes in thinking over time about the conception of giftedness. The early psychometricians such as Terman equated giftedness with high IQ, believing that intelligence was quantifiable and that intelligent behaviour was firmly embedded in the paradigm of school - based learning. Differences in ability were in degree rather than in kind, and a single score for measuring intelligence implied that it consisted of a cluster of inter - related general factors. Later studies, for example those of Thurstone and Guilford, suggested that intelligence may be multifaceted rather than consisting of one overall cluster of general factors ( Wallace & Pierce, 1992 ).

A multifaceted or multicategory approach to defining giftedness was incorporated into the federal policy of the United States ( Marland, 1971 ) and

the following New Zealand definition which guides this thesis, was developed from this:

*Children with special abilities (gifted and talented) are those who demonstrate high performance relative to their educational context in one or more of a wide range of areas, such as:*

- . *Specific academic, technical or mechanical aptitude and achievement*
- . *Creative, productive or intuitive thinking*
- . *Cultural arts: verbal, visual, performing*
- . *General intelligence*
- . *Psychomotor*
- . *Cultural traditions, values and ethics*
- . *Social skills and leadership*
- . *Aesthetics*

*Such abilities will become evident at different stages in an individual's development provided they are given the opportunity to demonstrate their ability.*

( NZ Department of Education, 1986 )

Wallace & Pierce ( 1992 ) say that giftedness, in recent thinking, is not perceived as a quantifiable and easily measurable construct. Emphasis has been placed on the continuing growth of the learner, and on promoting conditions which enable gifted behaviour to be demonstrated throughout a lifetime and in a wide variety of contexts. Motivation in the form of task commitment is a prerequisite for giftedness to manifest itself.

Renzulli & Reis (1986 ) suggest that fifteen to twenty per cent of a school's population may potentially be gifted in general ability or in specific performance areas. If the wide multicategory concept is used as a guideline, then a wide range of talents can be recognised and nurtured. As it is generally accepted that the environment, including the school environment, has a major role to play in allowing potential to be realised ( Sternberg & Davidson, 1986; Hallahan & Kauffman, 1988; Wallace & Pierce, 1992 ), and that the teacher is critical in this process ( Renzulli, 1968; Nelson & Cleland, 1971; Marland, 1972; Bloom, 1985; Passow, 1985; Whitmore, 1986; Braggett, 1993 ), then the education of teachers becomes vital.

*Teacher education, teacher training and teacher preparation* are all terms used to describe initial professional development at the pre-service level. Much of the literature refers to *teacher training*, but there seems to be a trend away from this term due to its connotations. Cropley & McLeod (1986) believe that *training* implies the establishment of specific habits, whereas the purpose of a teacher preparation programme for teaching gifted children is to develop awareness of the needs of exceptionally able youngsters, promote favourable attitudes towards them, provide teachers with information about exceptional abilities and available programmes and increase teachers' skills. The recent New Zealand study, "Windows on Teacher Education. Student Progress through Colleges of Education and the First Year in the Classroom" (Renwick & Vize, 1993) uses the term *teacher education*. All three terms - *training, education* and *preparation* will be used where particular authors have used them, as will the terms *students, student teachers* and *teacher trainees*.

In the context of the Research questions, a *programme* refers to the entire pre-service course of teacher education which an individual undertakes, while *provisions* refer to modules, papers or courses which are contained within that.

## ***Content of Chapters***

The next chapter provides an overview of relevant New Zealand and overseas literature and research. Chapter 3 outlines the methodology used in the study. Results of the survey of New Zealand and overseas provisions are reported in Chapter 4 and discussed in Chapter 5. Suggestions are made in Chapter 6 regarding future directions for pre-service programmes in which all prospective primary teachers would receive preparation in catering for children with special abilities.

## ***Chapter 2: Literature Review***

A search of the New Zealand literature in the field of pre-service preparation for teaching children with special abilities, revealed only two studies specifically into this area. No theses or full scale research projects have addressed the topic in New Zealand.

Part of a brief questionnaire and interview survey conducted by Pow ( 1985 ) to investigate the current policy and provisions for children with special abilities in New Zealand, looked at *Teacher Education and Teacher Courses*. She found that teachers' colleges included a section on children with special abilities in their general courses when dealing with individual differences or special needs, and all colleges had optional special needs courses which went into the topic in more depth. One College offered an optional seven hour course on children with special abilities in the third year. In discussing the survey findings at a subsequent conference ( Lopdell, 1986 ), the current provisions were considered to be inadequate and the workshop members recommended that each teachers' college establish a course giving an overview of children with special abilities and that all courses should include a component on children with special abilities.

McAlpine's (1992 ) survey gathered some information on courses in four of the six Colleges/Schools of Education. This data showed that consideration of catering for the needs of able children was included as part of curriculum courses such as reading and mathematics, and in the context of individual differences or catering for special needs. Optional courses on the education of children with special abilities were offered at three of the Colleges/Schools. McAlpine concluded that whilst there were encouraging signs amongst these offerings, in general they were optional and minimal.

Although a search of Dissertations Abstracts 1982 - 1994 revealed no theses or dissertations on the specific topic of pre-service education for teaching gifted children, other research in this area has been carried out overseas and will be referred to where relevant in this thesis. The greatest quantity of accessible material comes from the U.S.A.

Several general themes or issues emerge in the literature:

- a . The importance of teacher education and the need for an increased emphasis on educating gifted children in courses at the pre-service and / or in-service level.
- b . A discussion of the personal characteristics needed in a teacher of gifted children and the competencies and professional qualities a student teacher should develop during training.
- c. Recent innovation in types of courses provided and reflection on what makes a programme for educating prospective teachers of gifted children, effective.

### ***1) The Importance of Pre-Service Education in Teaching Children With Special Abilities***

According to Marland (1972 ) and Seeley (1989 ), research suggests that teachers without training in regard to gifted students often have negative or indifferent attitudes towards them. Morris (1987 ) studied the attitudes of 250 pre-service student teachers toward the gifted in Alabama by administering a questionnaire which measured both attitude toward and knowledge of giftedness. There was found to be a moderate correlation between student attitude and knowledge. The researcher concluded that positive attitudes would be enhanced if the amount of knowledge increased, and a need is indicated for considering gifted children when planning a total pre-service programme of course work and experiences for the student teacher.

Braggett ( 1990 ), commenting on the situation in Australia, notes that there are encouraging signs that the study of exceptionality is finally receiving increased emphasis in Australian teacher education, but most attention centres on children with learning difficulties, and gifted children receive only a limited mention. He believes that the basic egalitarian nature of Australian society which de-emphasises the need to provide for gifted students is reflected in the area of teacher education. Commenting on the Australasian educational scene ( 1993 ), he says, *Even more than Australia, New Zealand*

*reflects an egalitarian philosophy that views giftedness with some suspicion and emphasizes a flat playing field where equity does not necessarily extend to the gifted cause (p 829).*

McAlpine (1992 ) suggests that New Zealand Colleges of Education *are in a critical position to influence change of attitudes amongst pre-service teachers and to impart knowledge about learning and teaching associated with C W S A (p24).*

Clark ( 1992 ) also stresses the need for teachers to know how to meet the needs of gifted students who can be from two to eight years ahead of the curriculum offered at any grade level. Otherwise, she says, teachers feel threatened by or incompetent in catering for these students who often question the teacher's ideas, may refuse to do work which they consider boring and can be seen as a challenge to the teacher's authority.

Tomlinson et al ( 1994 ) report that in phase one of a larger three - phase study being conducted at the National Research Centre on Gifted and Talented at the University of Virginia, pre-service students believed in the importance of pupil differences and needs but had difficulty in catering for them. The authors caution that *preservice teachers sense that differentiating instruction for academically diverse learners is a low priority for their teacher education institutions, co operating teachers, and university supervisors. If that is the case, rather than being a time of internship or residency during which special diagnostic and prescriptive skills will be developed for addressing needs of academically diverse learners, preservice teachers will gain tacit permission to dispense learning as though all students need the same prescription or treatment (p113).*

Educators both overseas and in New Zealand ( Lindsey,1980; Cramond & Martin,1987; Seeley,1989; Braggett,1990; Freeman,1991; Williams,1991; McAlpine,1992; Reid,1993 ) are urging an increased emphasis on pre-service training in this area, including a consideration of the needs of able children from diverse cultural backgrounds ( Clark,1992; Reid,1992; Bevan - Brown,1993 ).

Bailey & Sinclair (1990 ) reported on research which surveyed final year primary and early childhood student teachers at two Advanced Colleges of

Education in Australia, their teacher education lecturers, practising teachers and parents of gifted and talented children. Between the four groups there was strong affirmative consensus in response to the item: *There should be provision during teacher training for all prospective teachers to learn how to cater for gifted/talented pupils* (p65).

The World Council for Gifted and Talented Children at their 1991 Vienna Summit of academics, practitioners, policy makers and youth, developed six global challenges, the first of which states : *Teacher education and development is the foremost priority in providing appropriate diagnosis and growth for a diversity of abilities* ( Atkinson, 1991, p28 ). This points to the importance of the teacher's role in fostering special abilities. As Lindsey ( 1980 ) states, *pre-service and in-service programmes must provide specific help to enable all teachers to identify and develop talents of the gifted as part of their responsibility to develop the potential of all students* (p8).

Williams ( 1991 ), a former senior inspector of primary schools in Auckland, with special responsibility for in-service education and pre-service selection for teacher training, in an article in 1991 made some recommendations in regard to gifted and talented children, which included the following :

*The Colleges of Education must:*

*\* Ensure that all trainees are given intensive pre-service training in identifying and working with these children.*

*\* Provide opportunities for trainees to work with gifted children as a component of their teaching practice* (p6).

In the same year, Freeman ( 1991 ), also a senior inspector who had responsibility for education of gifted children in Auckland, said that *the three year course in colleges of education should include a compulsory course on the teaching of gifted and talented children* (p20).

In 1993, the NZAGC National Teachers' Conference made some submissions to the Minister of Education. They recommended *more effective training for all students in all ethnic groups, on the identification of gifted children and on developing appropriate programmes*. Pre-service along with in-service training should be a part of a national policy on the education of gifted children, and pre-service training should include *a compulsory component on*

*the identification and teaching of gifted children ( NZAGC, 1993, p17-18 ).* No response from the Minister was received.

The need for a national policy on gifted children has also been advocated by educators such as McAlpine ( 1992 ), Moltzen ( 1992 ), Reid ( 1993 ), White ( 1994 ). Pre-service education would be considered in such a policy.

The New Zealand Ministry of Education ( 1993 ) stated as a target, in the discussion document, " Education for the 21st Century ", that by 1995 all graduating teacher trainees will have received initial training in the requisite skills to *meet the special needs of students with learning or behaviour difficulties, or those who are talented (p37)*. However, in the final draft of the document ( 1994 ), while stating that by 1998 schools and early childhood centres will be provided with information on the best current practices for extending children of high ability (p37) and that in teacher education programmes *there are few courses available on teaching talented children (p36)*, the target in regard to initial training of teachers has disappeared.

Bevan - Brown ( 1993 ) in a thesis which looked at Maori conceptions of special abilities and sought Maori opinion on effective and appropriate ways of identifying and catering for Maori children with special abilities, found that a major issue raised was the provision of adequately trained teachers who could recognise Maori children with special abilities, use appropriate teaching methods, and provide a supportive and culturally - valuing environment in which talents will surface. Bevan - Brown listed as one of six recommendations : *Provision should be made for teacher training and in-service courses that focus on identifying and catering for Maori CWSA in a culturally appropriate way (p159)*.

Although educators, parents and other members of society are urging an increased emphasis on preparing teachers to cater for children with special abilities, it is not universally accepted that the pre-service area is the appropriate one for this training.

In giving evidence to the Senate Select Committee in Australia, the Dean at Darling Downs College of Education said that compulsory specialist studies in gifted education should not necessarily be included in pre-service teacher training as there was little time available, especially in one year post-

graduate courses. ...*in pre-service the best we can do is provide teachers with those strategies which they can apply to a broad range of abilities, provide them with the confidence in using those, but above that provide them with the sensitivity to recognise the uniqueness of children, that each child is a unique individual who needs to be treated in different ways* ( 1988, p145 ). The Report also states that the Joint Review of Teacher Education conducted by the Commonwealth Tertiary Education Commission and Commonwealth Schools Commission in 1986 reached similar conclusions.

The introduction of the National Curriculum in the 1988 Education Reform Act in the U.K. seems to have led to an increased amount of time being devoted to developing curriculum expertise in teacher education courses. Jones ( 1991 ) reports that in his polytechnic, teaching studies time, which includes a module on teaching exceptionally able children, had been reduced from one third to one quarter of the four year course, while primary curriculum time had increased.

A survey of initial and in-service teacher training of gifted children in England, Scotland and Wales ( Sherwood, 1983 ) carried out prior to the introduction of the National Curriculum, had found that while the quantity and delivery varied greatly, sixty four of the seventy one Colleges and University Departments of Education declared their support for the principle of enabling teachers to acquire the understanding and skills necessary for the identification and adequate teaching of gifted children. Sherwood's conclusion was that since all teachers will teach gifted children, with mixed ability regular classrooms being the norm, *it follows that the initial professional training of teachers should prepare them for this task and that subsequent in-service courses should further develop their maturing professional insights and extend their skills and repertoire of resources* (p70).

George ( 1992a ) reported that in another survey undertaken in the U.K. by the National Association for Gifted Children in 1989, there was some feeling from Colleges and Universities that initial teacher training has such an overcrowded programme in teaching the National Curriculum, that it is best for teachers to have some experience of teaching before undertaking a specific course on education of the gifted.

Overall, though, a call to include pre-service training in gifted education is the more prevalent view. The Senate Select Committee for example, concluded that though it may be impractical to include compulsory intensive studies on the education of gifted children in pre-service teacher education, it recommended *that pre-service training courses include sufficient information about gifted children to make student teachers aware of the needs of those children and the special identification techniques and teaching strategies which the student teachers will have to use with the gifted on graduation* ( 1988, p146 ).

George ( 1992b ) recommends that training in the area of gifted education is probably best left to near the end of a B.Ed degree course when students can capitalise upon the wealth of knowledge, skills and experience acquired earlier in the course. He believes it is appropriate to deal with the issue in a general context of catering for individual differences, rather than as a totally separate issue, discussing the education of the less able and the more able as exemplars of similarities and differences in need and strategies in provision. *Once a teacher has been teaching for a while in school, then is the time to build on that essential experience to study in greater depth by in-service courses and higher degrees the needs of our most able children* (p84).

Because pre-service and in-service education are part of a continuum of professional development, if all teachers receive initial training in teaching gifted children, then in-service training can build on to this base for all teachers, and still further for those who are to become resource teachers for gifted children. Further university study can provide specialist certification as in the U.S.A. where experience as a regular classroom teacher is often a requirement for postgraduate training to become a certificated teacher of gifted children ( Karnes & Whorton, 1991 ). There has been a substantial increase in U.S. graduate level teacher training programmes in the education of the gifted , with 127 Colleges and Universities offering such programmes in 1990-1991 ( Parker & Karnes, 1991 ).

Clark ( 1992 ) says that even though all teachers need to receive some training in understanding giftedness, most of the courses in the United States are offered at the graduate level and to students taking them in pursuit of a higher degree in this area of specialisation. This lack of course provision at

the pre-service level may explain Hansen & Feldhusen's ( 1994 ) conclusion that *typical preservice teacher training programs do not adequately prepare teachers to meet the needs of gifted learners* (p115). They cite Kogan's review of studies of pre-service and beginning teachers which suggest that for professional growth to occur and in order to alter misconceptions and biases, they need *specialized training or experiences that challenge their beliefs* (p115).

Newhouse-Maiden & Williams ( 1994 ) report that in most countries university courses for teacher training in gifted education are at the graduate level with few being offered at the undergraduate level, but both sectors are areas of growth.

Because in New Zealand, as in Australia, the U.K. and in parts of the U.S.A., the majority of gifted children are educated in regular, mainstream classrooms, there is a recognition that all teachers need to have knowledge and understanding of the needs of these children. Both pre-service and in-service education make a contribution to this knowledge and understanding.

## ***2) Necessary Characteristics and Competencies for Teachers of Gifted Children***

There is much discussion in the literature regarding what characteristics and competencies are necessary for teachers working with gifted children.

Renzulli ( 1980 ) believes that the long lists of personal characteristics which are often cited as being important for teachers of gifted children are *pure American pie* because they are very general and idealistic and all teachers should possess those characteristics. Copley & McLeod ( 1986 ) also say that there is a danger that the lists of characteristics may encompass all virtues, and simply be a portrait of an idealized teacher.

Maker ( 1982 ) regards two characteristics as basic necessities - an accepting or non - judgmental attitude and flexibility.

Feldhusen & Hansen ( 1988 ) report that Hultgren & Seeley ( 1982 ) and Feldhusen ( 1985 ) reviewed studies of the characteristics of effective teachers of the gifted and talented. The following characteristics appeared in both lists : intelligent, achievement oriented, having favourable attitudes towards gifted students, good sense of humour, hard working and a broad general knowledge. Other characteristics mentioned in one or other lists were : flexibility, enthusiasm, a belief in individual differences, being a facilitator rather than a director of learning, stimulating, imaginative, systematic and orderly, and experienced and self-confident.

Sisk ( 1987 ) believes that personal characteristics, including a sense of humour and flexibility, are inherent traits and probably the least amenable to change. Thus Mulhern & Ward's ( 1983 ) distinction between personal characteristics necessary or advantageous on entering training and professional characteristics which can be developed during training, is a useful one.

Many writers make a similar distinction between personal characteristics on the one hand and professional characteristics, competencies or teaching behaviours on the other.

Lindsey ( 1980 ) who includes many of the personal characteristics already cited as well as *is intuitive, perceptive and is committed to excellence (p13)*, also itemises personal - professional predispositions and teaching behaviours which include using problem solving procedures, using varied strategies and developing a flexible, individualized programme. She suggests that in teacher education, competencies should be developed in three areas - what a teacher needs to be, to know, and to be able to do.

Maker ( 1982 ) outlined philosophical and professional characteristics as well as personal teacher characteristics. Issues such as attitudes towards elitism, creativity, and the need for nurturance of giftedness influence a teacher's philosophical stance. Professional characteristics include knowledge of and ability to use strategies and teaching methods consistent with the needs and interests of gifted students and can be viewed as requisite competencies.

Silverman (1982 ) found that experienced and successful teachers of the gifted, as compared to student teachers and other teachers, promoted self-

directed learning, avoided spoon-feeding information, asked provocative or divergent questions, encouraged students to form their own judgments and self evaluate, and developed close personal relationships with students.

Renzulli & Reis ( 1986 ) discussed three major components that constitute the ideal teacher of the gifted. The first is an in-depth knowledge of at least one discipline and an understanding of general research methodologies. They believe that even though teachers at primary level teach many subjects, through advanced content mastery and personal involvement in a discipline, teachers develop the kind of appreciation for within - discipline thinking that improves the guidance of learning in other areas. Borland ( 1989 ) also believes the teacher should be a student or scholar in a significant area of inquiry and sees it as desirable for a teacher to earn a degree in the arts, sciences or humanities and then have specialized professional training to be a teacher at the graduate level.

The second component Renzulli & Reis specified is instructional technique which is contributed to by both the personality and characteristics of the teacher and the training received. The former include flexibility, commitment to excellence, and a high energy level. Training should be geared toward developing a range of teaching styles and encouraging flexible use of them to accommodate individual abilities, interests and learning styles.

The third component is *romance with the discipline* (p180) or a passion for the material being taught. Renzulli & Reis believe that it is this romantic relationship with a discipline that causes certain teachers to seek out and nurture students of remarkable potential.

Because all of these components are important, they believe that future practice may need to focus on teacher selection as much as teacher training.

Cross & Dobbs ( 1987 ) report on a survey completed by State Department Directors of Gifted Education in forty states in the U.S.A. which asked them to determine the degree of importance of a list of topics associated with the preparation of teachers of the gifted and talented compiled from current course objectives in colleges and universities, from lists of teacher competencies, and from recommendations of the National Association of Gifted Children's Committee for Excellence in Teacher Training. The three

identified as the most significant were *Knowledge of educational and psychological needs of the gifted and talented, Application of a variety of instructional models / educational strategies appropriate for use with the gifted and talented, and Ability to modify, adapt, design appropriate curricula units of study for use with the gifted and talented* (p171).

Renzulli ( 1992 ) discussed the role of the teacher in effectively catering for gifted students, particularly in relation to helping them become creatively productive individuals. He reported that studies by Chambers in 1973 and Torrance in 1981 found that teachers who fostered creativity allowed students greater choice in selection of topics, welcomed unorthodox views, rewarded divergent thinking, expressed enthusiasm for teaching, interacted with their students outside of class, and generally conducted classes in an informal manner.

Clark ( 1992 ) believes that it is the above average, creative and task committed teacher who can learn the roles necessary for teaching gifted children. A teacher of the gifted does not necessarily have to be gifted, but should be intelligent at an above average level so he or she can empathize with the high level of intelligence of the student. Gross ( 1992 ) who is involved in teacher education in Australia also believes that above average ability, task commitment and creativity are necessary qualities for a teacher of gifted students. She related Renzulli & Reis' ( 1986 ) three rings of gifted behaviour to necessary qualities for teachers. They need above average teaching ability which is partly determined by personal characteristics and partly acquired through training; creativity - teachers need to be flexible and imaginative; and task commitment - they have to be prepared to work hard. Mulhern & Ward ( 1983 ) believe that the teacher *whose own intellectual insight and curiosity remain underdeveloped runs the risk of never really motivating students* (p154-155).

Maker ( 1982 ) states that teachers of the intellectually or academically gifted must have a high degree of intelligence, and teachers of the creatively gifted need such characteristics as a high regard for imaginative ideas.

Borland ( 1989 ) believes that if a child is gifted in dramatics, a teacher's gift for drama is more important than high intellectual ability but teachers of the intellectually or academically gifted should themselves possess very high

intellectual ability. This high intellectual ability is, in his view, a necessary but not a sufficient quality for success.

The recent study ( Renwick & Vize, 1993 ) which examined the process of teacher education in New Zealand from a student perspective, asked students what personal qualities made a good teacher. They nominated many of the same characteristics mentioned in the research on teachers of gifted children such as flexible, confident, creative, possessing a sense of humour. Intelligence, however, was not mentioned.

Clark ( 1992 ) on reviewing many studies, says that teachers must develop seven specific abilities if they are to be effective with gifted learners. Basing a teacher education programme, either pre-service or in-service on the seven competencies ensures that educators have at least the basic requirements for providing quality programmes for gifted learners.

In summarised form, the seven competencies are:

- a. a knowledge and understanding of the cognitive, social and emotional characteristics, needs and problems of gifted students. This includes an awareness of and sensitivity to the different characteristics and needs of children from diverse cultural backgrounds.
- b. the ability to develop a flexible, differentiated curriculum appropriate to meeting the individual needs of gifted pupils
- c. the ability to create an environment in which the gifted can use their strengths, feel challenged and explore personal and interpersonal development
- d. the ability to teach the gifted learner the skills of higher level cognitive thinking and self-actualization
- e. the ability to nurture creativity
- f. the ability to encourage a sense of social awareness
- g. the ability to relate well to colleagues and parents of gifted learners

To develop such competencies, she says, requires an uncommon amount of ability to empathize and inspire, tolerate ambiguity, be open, flexible and innovative, share enthusiasm, be authentic, humane and knowledgeable, and value intelligence, diversity and growth. These qualities make good teachers, and it is hard to determine which are necessary for all students and which are unique preferences of gifted students.

As Seeley ( 1989 ) stated, the traits found in studies to be necessary for successful teachers of the gifted *are seen as desirable for all teachers but repeatedly are listed as essential for teachers of the gifted* (p283). Thus, desirable characteristics could be a factor in pre-selection for all students, as possession of personal characteristics would be advantageous in helping develop appropriate professional characteristics during training. Cropley & McLeod ( 1986 ) believe that there is a special orientation in teaching behaviour needed for working with gifted children and this may come from a combination of personal characteristics and competencies acquired during training.

Teacher education should contribute to the development of what a teacher needs to be ( personal qualities ), and to know and be able to do ( professional competencies ) ( Lindsey, 1980 ). The latter competencies can be progressively developed, if Scott's ( 1992 ) view of competencies as desirable attributes in the process of developing, rather than end states, is accepted. Rogers ( 1989 ) delineates three levels of training needs and identifies knowledge, understanding and competencies necessary for each level. The first level is for a general classroom teacher, where knowledge of characteristics and needs of gifted learners and strategies such as higher order questioning, are needed. The next level, for a resource teacher of the gifted, adds such aspects as knowledge of curriculum development models, designing Individual Education Programmes and counselling. The third level for a gifted programme co-ordinator or director includes knowledge of systems approaches and skills in staff development. The first level of training could occur at the pre-service level, the second at the in-service level, with further study being available to those who wish to specialize.

### ***3) Effective Education Programmes for Developing the Professional Qualities Needed to Teach Children with Special Abilities***

Some recommendations as to how competency to teach gifted students may be developed in training, emerge from overseas research and literature. Specific courses will be discussed in a subsequent chapter, but there are some general themes apparent.

One of these indicates that the way in which gifted children are believed to learn best should also be the way in which student teachers learn. Thus there is a need for a metacognitive approach to teacher education. Metacognition refers to knowledge and awareness of one's own cognitive processes and the ability to monitor, regulate and evaluate one's thinking. *Metacognitive processes enable individuals to better control their thinking and thereby become more efficient and flexible learners* ( Shore & Dover, 1987:68 ).

Rogers ( 1983 ) reviews the research on metacognition and intelligence which provides some evidence that gifted children are more metacognitive, and at an earlier age than others, and could therefore benefit from using these processes in the classroom. Pui-wan Cheng ( 1993 ) in synthesising the analysis of both theoretical conceptions and empirical research on metacognition and giftedness, also found the evidence to be highly suggestive in indicating superior metacognitive ability as an essential component of giftedness. She says that while the evidence is not yet conclusive as to whether there are qualitative differences, research indicates that gifted children are more advanced in metacognitive development and can differentially benefit from metacognitive instruction. They can be stimulated to be introspective about their thinking and learning processes and encouraged to generate and evaluate alternative solutions to problems encountered in daily life and in school settings.

Rogers ( 1983 ) believes that because gifted children are metacognitively advanced, teachers must be aware of this aspect of cognitive development through themselves being taught in a metacognitive way. *Teacher education must guide teachers in creating an atmosphere conducive to self - inquiry and*

*the introspection of learning processes. It must help future teachers to develop a general metacognitive approach to self - analysis of thinking and knowing in the classroom (p21).*

This is in keeping with an important theme in general teacher education, that of preparation of reflective teachers ( Pultorak, 1993 ). The highest level of Van Manen's ( cited in Pultorak ) levels of reflectivity i.e. critical reflection, may be particularly relevant. This involves reflection on an event with open - mindedness, and includes moral and / or ethical considerations such as whether important human needs are being met.

The self understanding aspect of metacognition is seen by Lindsey ( 1980 ) as important in helping students develop the desirable personal and professional characteristics discussed earlier. She believes that no amount of professional knowledge or skill is likely to be effective, unless a teacher understands and likes himself or herself and is sensitive to and supporting of others. Teachers who may teach gifted students who are more able than themselves must have outstanding ego strength and healthy self concepts. Because the latter develops over time, student teachers can be helped in self examination, discussion of feelings and values with others, as well as by increased skill or knowledge.

Newhouse-Maiden & Washbourne ( 1991 ) also believe that the metacognitive approach is important. As a result of a high school science extension programme with which they were associated in Perth and an analysis of the role of the teacher / mentor, they saw some possible implications for teacher education. The teacher acted as a mentor or facilitator and over time placed more and more of the locus of control of learning into the hands of the students, fostering in them effective information processing and metacognitive strategies. The authors say that alternative approaches to teacher education may be needed, if future teachers are to fulfil this role and it may need to focus on those same strategies which made for effective learning for the science extension students. They suggest this type of teacher education would have a profound effect not only on the education of our most gifted students, but on the total school population. This approach has since been incorporated into a teacher training programme in Western Australia ( Newhouse-Maiden & Williams, 1994 ).

Lindsey ( 1980 ) believes too that the same principles that guide school programmes for developing each individual's potential, including the gifted, should also guide programmes to educate teachers. *This means that teacher education programs should be individualized, that varied opportunities should be available for each student to identify his or her special needs and interests, and that all aspects of the program - the educational climate, teaching strategies, and evaluation criteria - should provide for human differences.* (p27). Necessary competencies can be developed using a variety of different approaches. She also believes that those who teach teachers must themselves possess the attributes, knowledge and skills necessary for facilitating the development of individual potentialities. They must challenge student teachers to do their best, manifest respect for individuality and stimulate creativity.

Braggett ( 1990 ) also stresses the need for university / college courses to provide for individual differences and encourage talent to be fostered in different ways, rather than follow the prescriptive model of structured courses with stringent guidelines and a uniform pace.

Mares & Sikora ( 1993 ) concluded from a study of what gifted children prefer in their teachers, that teacher education should not only concentrate on providing the teacher with methodology, but stress the need for the teacher to perceive the student as a person rather than concentrate on cognitive abilities only. The strongest preferences of primary age gifted children were for a teacher *who cares about you as a person rather than as a student, who compares you to your previous performance only and will search for the answers with you* (p17-18).

Passow ( 1985 ) reports that studies of gifted adults have pointed to the importance of a *teacher* in the development of gifted individuals. *Teacher* in such studies includes, but is not limited to, classroom teachers. Rather, those *teachers* who were significant in the lives of gifted individuals, served often as mentors or role models. Bloom's ( 1985 ) retrospective study of gifted people showed that a key person who provided impetus in the form of recognition and encouragement at the right time, was very important.

In teacher training, teacher educators can act as mentors to student teachers, who in turn could be mentors for pupils in a practicum component of their training, thus having an opportunity to see the value of this style of *teaching*.

*... practicum experience is a valuable and necessary component of a comprehensive training program for prospective teachers of gifted and talented students* according to Feldhusen & Huffman's ( 1988:36 ) review of the literature.

Although there seems to be general agreement on the value of practical work with children, Clark ( 1992 ) reports that university personnel in the U.S.A. surveyed by Hultgren in 1981 saw a deficiency in the lack of supervised practicum experiences, and Clark believes this deficiency still exists. However, Karnes & Whorton ( 1991 ) report that of the 21 states offering certification or endorsement for teachers of the gifted and talented, whereby they undertake a certain number of semester hours for college or university credit, 14 of these incorporated a practicum requirement.

An investigation of in - school training for Division A ( primary ) students carried out at a College of Education in New Zealand ( Battersby & Ramsay, 1987 ) showed that experiences in schools provide in - depth opportunities to develop teaching competencies. They concluded that from an examination of lecturers', students' and teachers' perceptions of the in - school training programme, a firm conviction emerges that in - school training is probably the most important element in teacher education. If these three groups perceive the practicum element of training to be so important, this has implications for the experiences students have with gifted children as part of it.

The practicum component can be one of the considerations when asking how each component of a programme, such as professional education or subject specialization, contributes to:

- a. the development of those characteristics and qualities essential to effective guidance of gifted children
- b. the acquisition of relevant knowledge
- c. the development of intellectual and pedagogical skills required

These are the three areas of what a person needs to be, to know and to do to be effective with gifted youngsters ( Lindsey, 1980 ).

Another issue raised in the literature is whether courses in gifted education should be taught separately or in the context of special education or general education. As discussed earlier, some educators believe that learning about gifted children in the context of learning about individual differences, is sufficient.

Hultgren & Seeley ( 1982, cited in Seeley, 1989 ) surveyed a large sample of university programme directors and practitioners involved in gifted education. The research indicated that more than seventy five per cent believed all teachers should have training in education of the gifted and they preferred a separate semester or quarter course for all teachers rather than a shorter unit within general education coursework which was currently the more common practice. Practitioners, in particular, were highly in favour of an introductory course for all teachers. Seeley believes this is because the majority of these teachers of gifted children had first been classroom teachers and realized that where full - time special programmes do not exist for gifted children, regular teachers must *assume a great responsibility for the affective and cognitive needs of gifted students* (p286).

Jones ( 1991 ) reports on a fourth year B.Ed Honours option on Children with Special Needs which included a six week unit on education for gifted children. In his view, *...as a short unit of a long course it raised more questions than it could possibly answer on the educational provision for exceptionally able children* (p76). Acting on the suggestion of the students at the polytechnic that gifted education could be a course in its own right, a module on *The Exceptionally Able Child* was developed.

Differing approaches to the contexts in which courses on the education of gifted children are introduced, obviously exist. In New Zealand, before the end of the decade, the way in which teacher education is delivered will change, and this will influence types of courses on children with special abilities and the contexts in which they are presented. A National Qualifications Framework is being developed. This framework will comprise unit standards, and providers and institutions will be accredited to offer a range of unit standards leading to particular qualifications. Two strands of unit standards are being developed - those for general teacher education ( Gibbs & Munro, 1993 ) and those for educators working with children and young people with special needs ( Dunckley & Knight, 1994 ).

In the general strand, the endorsed unit standard titles for qualifications in primary and secondary teacher education contain nothing in regard to special abilities, but some titles are relevant in a more generic sense. For example, *identify student learning styles, developmental needs and interests; engage students in decisions about programmes; produce individualised learning programmes and maintain and enhance performance levels* ( Gibbs & Munro, 1993, p22-24 ).

Within the proposed special education standards, which are in draft form, two refer specifically to children with special abilities. They both appear in the domain of *Assessment and Programming in Special Education*. One title or outcome is *Evaluate the Research Literature on Facilitating Learning in Young People With Special Abilities* and the accompanying purpose statement specifies, *People credited with this unit will be able to describe and appraise different theoretical approaches and philosophies to the learning and development of young people who are gifted and talented* ( Dunckley & Knight, 1994, p37 ). The other outcome is *Develop Programmes to Facilitate Learning in Young People With Special Abilities* and states *People credited with this unit will be able to assess the learning and developmental needs of young people who have special abilities. They will be able to plan, implement and evaluate programmes to meet these needs* ( ibid, p38 ).

How unit standards are combined into courses for teacher education qualifications is the responsibility of the providers, so the actual contexts for provision of courses on children with special abilities in the future in New Zealand are unknown at this time. Examples of specific courses, in differing contexts, currently provided in New Zealand and overseas, will be discussed in the Results section.

## ***Summary***

The way in which student teachers learn may be just as important as what they learn. Knowledge and understanding of the needs of gifted children and how to cater for them can be developed through a metacognitive and flexible approach within initial teacher training courses. This has implications for teacher educators and the way in which they conduct their courses. It may also mean that the personal qualities with which student teachers enter

training, can be modified and developed if a metacognitive approach to preparation is taken. Thus, although personal qualities should be considered in the initial selection of student teachers, these can, to some degree, be developed, along with professional competencies, during the course.

A special orientation in teaching behaviour needed to successfully work with gifted children seems to require the following attributes in particular - flexibility, a favourable attitude toward and understanding of the needs of gifted students, being knowledgeable, intelligent and self confident and a facilitator of learning, encouraging of creativity and higher level thinking, and having a sense of humour.

Although it is sometimes difficult to fit courses on teaching gifted children into a crowded pre-service programme, there is a widespread view that at least an initial introduction to this area, incorporating practical experience in schools, must be included. In mainstreamed educational contexts where children learn in mixed ability classrooms, it is vital that teachers are familiar with catering for children with special abilities. In-service development can build on to the knowledge base established in pre-service training. This is in keeping with the future proposed qualification structure in New Zealand teacher education, where some demonstration of the attainment of standards will be required at the initial teacher qualification stage and others at subsequent qualification levels. In that sense, *initial teacher education cannot be thought of as an end but as a beginning to career - long professional development* ( Gibbs & Munro, 1993, p5 ).

The longitudinal study at the University of Virginia ( Tomlinson et al ,1994 ) in which pre-service student teachers are being studied into their first year of teaching, should further contribute to an understanding of ways in which pre-service teachers develop awareness of the needs of exceptional learners, including gifted learners, and how they begin meeting these needs.

In Chapter 5 of the thesis, the literature which has been reviewed in this chapter will be discussed in relation to the findings from the present study.

The following chapter outlines the methodology used in the study and introduces the various phases of the research.

## ***Chapter 3 : Methodology***

This exploratory study utilized several methods to ascertain how learning about children with special abilities can be incorporated into primary level pre-service programmes. A search of the literature combined with personal correspondence, sought specific examples of overseas courses. Questionnaire and interview surveys were undertaken to seek qualitative and quantitative information on present provisions in New Zealand. Questionnaires were sent to the six main providers of pre-service education, and follow-up interviews were conducted in three of them.

A questionnaire format has limitations. The kinds of questions that can be asked and the types of response modes are limited. All of the sample have to be asked the same questions, although some response keyed questions can be used. A standard set of questions yields data which can be compared, but there is no standardization of response conditions. When a questionnaire is self - administered, the motivation of the respondents is unknown and therefore the validity of the responses is difficult to judge. Also, individual respondents may interpret questions in different ways. However, as questionnaires are economical to send, large samples of target groups can be reached.

Interviews have some advantages over questionnaires and can complement their use. They are potentially more flexible in that the mode of questioning can be altered if necessary, questions can be rephrased, the respondents can elaborate upon their ideas and the interviewer can probe for additional information. Opinions and feelings can be reported. They can also allow the interviewer to test the limits of the respondents' knowledge and sometimes unexpected answers can result. Interviewees may also be more motivated to respond if they have agreed to the interview and are face to face with the interviewer. However, the way in which they respond may be influenced by the position or the beliefs of the interviewer. Interview methods cannot economically and conveniently survey the large numbers of people that questionnaires can. The information gathered is also more difficult to collate,

especially where lengthy responses to open-ended questions are recorded (Cohen & Manion, 1989).

In this study, triangulation allowed some verification to be built into the data gathering process. Using both questionnaires and interviews, rather than only one survey method, allowed information to be supplied by a larger number of people, with varying roles, and allowed for information to be checked and clarified (Miles & Huberman, 1984).

There were 5 phases of the research :

- Phase 1 :**            **Questionnaire Construction, Distribution  
& Collation**
- Phase 2 :**            **Interviews**
- Phase 3 :**            **Combination of Information from Questionnaires  
& Interviews**
- Phase 4:**            **Personal Correspondence with  
Overseas Providers**
- Phase 5 :**            **Integration of Information from Questionnaires,  
Interviews, Personal Correspondence & Literature  
Review**

The methodologies of these phases will be described in this chapter, and results of each phase will be referred to in subsequent chapters.

## ***Phase 1 : Questionnaire***

### ***A. Selection of Sample for Questionnaire Distribution***

In an attempt to gain a comprehensive picture of existing provisions, all of the six major providers of pre-service education for primary school teachers in New Zealand were surveyed. A questionnaire was more practical and economical than interviews, although some follow up interviews were

conducted. Questionnaires were sent to each of the five Colleges of Education and one University School of Education.

Consideration was given to the issue of which personnel should be asked to complete the questionnaire. It was believed that learning about children with special abilities was likely to be incorporated into many programmes and courses including degree and diploma programmes, curriculum courses, special education courses and professional studies, as well as being addressed in separate courses on children with special abilities. To accommodate the need for many people to respond to the questionnaire, a covering letter was sent which asked that input be sought from personnel in all those areas of the College or School of Education which *provide either specific courses or include some training in how to cater for children with special abilities at the PRIMARY SCHOOL level*. Multiple copies of the questionnaire were enclosed so that each Director and Head of Department, including those in off - campus facilities, could complete the sections relevant to their programmes.

### ***B. Construction of Questionnaire***

The questionnaire was designed to gather information from the respondents about :

- a) Courses which specifically focused on children with special abilities - their length and content, the numbers taking them and to whom they were offered ( Research question 1 ).
- b) Courses which incorporated learning about children with special abilities into them - the types of courses, to whom they were offered, the numbers taking them, and the proportion of time spent on children with special abilities ( Research question 1 ).
- c) University papers available to students on teaching children with special abilities, and the numbers enrolled in these papers ( Research question 1 ).

- d) The philosophy which guided the way in which student teachers were educated about children with special abilities ( Research question 2 ).
- e) Limiting factors to providing education for students on teaching children with special abilities ( Research question 3 ).

As the choice of question format should be based on the variables being measured, such as facts or figures, attitudes and preferences, a variety of types of questions was incorporated into the questionnaire. Questions 1 and 3 were response keyed, so that if the response was *no*, then the respondent ignored the rest of that question and moved to the next one. This alleviated some of the disadvantage of everyone answering all of the same questions, when it was inappropriate to do so.

Fixed - alternative items, whereby a respondent had to make a categorical response, were appropriate where a yes / no was required or when it was being asked whether a course was compulsory or optional.

Items requiring fill - in responses were used to find out such information as duration of courses, to whom courses were offered and numbers of students taking courses.

Fill - in responses in tabular form are convenient for responses that include a variety of information rather than a single piece of information. This format was used in Question 2 to gather data on a range of courses which incorporated components on teaching children with special abilities.

Open ended items supply a frame of reference for the respondent's answers but place a minimum of restraint on them. Other than the subject of the question, which is determined by the nature of the problem, there are no other restrictions on either the content or the manner of the reply.

Unstructured responses can help to overcome the problems of the limitations of questionnaires compared with interviews, and may increase the motivation of the respondents, as they can express themselves in their own way ( Cohen & Manion, 1989 ). This type of item was appropriate to find out about the rationale guiding the type of provisions, limitations on provisions, and also as

an invitation to add any clarification or further explanations at the end of the question.

As all six providers were being surveyed, a pilot study using a trial questionnaire could not be undertaken. Instead, a draft of the questionnaire and letter were discussed with a senior staff member responsible for pre-service education at one of the Colleges of Education, to check on :

- a) the clarity of meaning of the questions asked
- b) the way in which Colleges/Schools of Education could be asked to distribute the questionnaire to be filled in

Minor revisions were then made to the letter and the questionnaire.

### ***C. Distribution and Return of Questionnaire***

The multiple copies of the questionnaire, along with a covering letter were sent to the principal of each College of Education and University School of Education. A period of five weeks was allowed for the return of the questionnaires. To increase the motivation to reply, it was stated that a summary of the research findings would be forwarded to them; that it was important that questionnaires be returned from all of the providers in order to obtain an accurate and complete overview; and that specific Colleges/ Schools or personnel would not be named.

Questionnaires were returned from all six Colleges/Schools of Education.

### ***D. Collation of Data from Questionnaires***

Responses to Questions 1, 2 and 3 of the questionnaire were analysed, to gather data for Research question 1 : *What provisions exist currently in New Zealand ?*

Responses to Question 4 provided information for Research question 2 : *What rationale, philosophy or research base guides these provisions?*

Question 5 provided data for Research question 3 : *What factors limit the type and amount of provision?*

General comments were collated with answers to research questions where appropriate, or included in the data collection as *Other comments or information*.

## ***Phase 2 : Interviews***

### ***A. Selection of Sample for Interviews***

Interviews were conducted to supplement and clarify the data gathered from returned questionnaires. As it was beyond the scope of this study to conduct interviews at all six of the Colleges/Schools, the decision on where to conduct them was based on one or a combination of the following factors :

- a) Courses being provided which were unique or innovative.
- b) Representation of differing approaches, so a range of examples and philosophical perspectives could be explored.
- c) Sufficient information being returned to indicate that some provisions for learning about children with special abilities were being offered.
- d) The need to seek additional information to that provided in the returned questionnaires.
- e) An indication that multicultural perspectives on children with special abilities were incorporated into courses.
- f) Economic and geographical expedience.

Letters were sent to the principals of three of the Colleges/Schools seeking permission to interview specific personnel. In each case a request was made to interview the Director of Primary Programmes and another person identified through the questionnaire data as having relevant information to

contribute. Two of these people taught courses on gifted education or children with special abilities.

All three of the principals granted permission. In one case, two further people to interview were suggested by the principal, so that four interviews were conducted at that institution. In one institution, a Head of Special Education was put forward as an interviewee rather than the Head of Primary Programmes. A total of eight interviews was conducted.

**TABLE 1 : PERSONNEL INTERVIEWED**

Position	Institution		
	A	B	C
HOD Special Ed.	■		■
Director Primary Progs.		■	■
HOD Prof Studies			■
Senior Lecturer, Ed.	■	■	
Sen.Lecturer, Special Ed.			■

### ***B. Design of Interview***

A core of questions was devised to ask each of the interviewees. Other questions specific to the position of the person being interviewed, were also asked.

## ***The Core Questions***

The core questions asked mainly for the opinions, beliefs and perspectives of the respondents. Factual information had already been collected from the questionnaires.

Questions asked in both the interviews and questionnaires related to the rationale or philosophy guiding provisions for children with special abilities and factors limiting the type or amount of provision. They were included in the interviews for the following reasons :

- a. to provide further perspectives on these issues
- b. because not all interviewees had been involved in completing the questionnaire
- c. to give those who had responded to the questionnaire an opportunity to elaborate on the information offered

Table 2 shows the overlap between questionnaire and interview questions.

Although the core questions were to be asked of each person so that differences and similarities in responses could be determined, there was some flexibility through response keying within the questioning schedule. Depending on the reply to certain questions, a decision could be made on whether it was appropriate to ask further questions on that theme.

The questions were nearly all open-ended in nature. One question provided a choice of three options, but in the interview situation it was likely that the respondents would elaborate upon reasons behind the choice.

The core questions are shown in Appendix 2. Those not necessarily asked in all cases are shown in italics.

**TABLE 2 : RELATIONSHIP OF CORE INTERVIEW QUESTIONS TO QUESTIONNAIRE**

<b>Core Interview Question Number</b>	<b>Topic</b>	<b>Included in Questionnaire</b>
1.1	Whether CWSA should be included in pre-service programmes	
1.2	Placement in course	
2.1	i) Philosophy or rationale ii) Variance between departments	√
2.2	Historical change in philosophy	
2.3	Modification of philosophy	
2.4	Influence of schools	
3.1	Limiting factors	√
4.1	Practicum briefs	
4.2	Contribution of teaching sections	
4.3	Teaching sections focusing on CWSA	
5.0	Further comments	√

### ***Specific Questions***

Questions were devised which sought elaboration upon information provided in the questionnaires, in regard to specific courses. They were asked of individuals likely to have knowledge of those particular provisions. For instance, a Head of Special Education could be asked about the content and delivery of courses run within the Special Education department. Many of these questions were of a factual or information seeking nature, as these people also had the opportunity to answer the more philosophical core questions. In some cases, the questions were a validation of the researcher's interpretation of the information supplied in the questionnaire.

### ***C. Interviews***

The researcher travelled to three Colleges/Schools of Education to conduct the interviews. All those being interviewed agreed to their responses being tape recorded.

An outline of the question topics had been sent prior to the visit to each person being interviewed.

### ***D. Collation of Interview Information***

Interview recordings were transcribed and coded.

#### ***The Core Questions***

These were analysed question by question, and where information from the answer to a different question was relevant, it was also included.

Due to differing numbers of personnel being interviewed at each institution and because these personnel held various positions, direct comparisons between institutions were not made. Where relevant, similarities and differences of responses were noted within institutions. Comparisons were also drawn between individuals working in different capacities, such as those teaching courses on children with special abilities, and those lecturing in special education.

General comments were collated with answers to core questions where appropriate, or included in the data collection as *Other Comments*.

#### ***Specific Questions***

Answers to these were included in the collation of answers to core questions, where they provided information which directly addressed a core question.

Other specific information about courses was used in combining questionnaire and interview data.

### ***Phase 3 : Combination of Information from Questionnaires & Interviews***

Information from the individual interviews at each institution was combined with the questionnaire data from each of those three institutions. Where written information and course outlines had been provided by interviewees, this information was also included.

Profiles of provisions at each of these three institutions were then developed from all of the relevant information.

### ***Phase 4 : Personal Correspondence : Overseas Providers***

The literature search provided references to specific teacher education programmes and courses in gifted education, overseas, and to personnel associated with the provision of courses. The researcher wrote approximately 35 letters to people or institutions referred to, where relevance to the pre-service area was suggested. Those contacted were mainly, though not exclusively, in the U.S.A., U.K. and Australia. Sufficient replies were received to provide examples of different types of programmes.

A decision to limit the examples described in this thesis to the U.S.A., U.K. and Australia was made for the following reasons :

- a. These countries were referred to most often in the literature and therefore, the greatest quantity of correspondence sent and received was from these countries.
- b. The examples from the U.S.A., U.K. and Australia represented several differing approaches.
- c. Pre-service CWSA courses in Australia and U.K. mainly prepare teachers for mixed ability classrooms, as in New Zealand, and were therefore very relevant to this study.

## ***Phase 5 : Integration of Information***

Data from the questionnaires, interviews, personal correspondence and literature review was then combined, and recommendations for future provisions in New Zealand and areas for further research, were made.

### ***Summary***

Questionnaires were sent to, and returned by, all six main providers of pre-service teacher education in New Zealand. The questionnaire data was supplemented by conducting interviews in three of these Colleges/Schools of Education.

The literature search not only provided background information and research, but also yielded references to courses on teaching gifted children in other countries. Following up many of these references resulted in information being provided on specific courses and programmes.

Results of the questionnaire and interview surveys, and details of the overseas courses, are outlined in Chapter 4 and discussed and analysed in Chapter 5. Recommendations for future directions and further research follow in Chapter 6.

## ***Chapter 4 : Results***

The results of the first four phases of research outlined in Chapter 3 are reported in this chapter. Integrated results are discussed in Chapter 5.

Results of the questionnaire survey and the interviews, as well as examples of overseas provisions, are reported in this chapter. By combining questionnaire and interview data, summaries are given of provisions in the three Colleges where interviews were conducted. In order to retain confidentiality, the word *College* will be used generically to cover Colleges or Schools of Education.

The results of correspondence with overseas providers, along with descriptions of programmes reported in the literature, provided some specific examples of courses in other countries. These are outlined at the end of the chapter.

### ***Phase 1 : Collation of Information from Questionnaires***

Questionnaires were returned from all of the six Colleges/Schools of Education.

College A returned one full questionnaire, with three other respondents completing Question 2.

College B returned one questionnaire, filled in by a respondent with an overview of the primary education programme.

College C returned four questionnaires with parts filled in, plus a covering letter providing more information. One questionnaire was received from the early childhood department, but this was not collated in the results, as this study focused on primary level training only.

College D returned one questionnaire with one page filled in, plus a letter from an individual showing interest in a course on children with special abilities in the future.

College E returned three questionnaires.

College F returned one full questionnaire, with a course outline attached.

Questionnaire data is reported for each question, College by College. Questions 4 and 5 are more subjective than the preceding questions, and responses to these are reported in direct quotations. Additional information which respondents wished to add is also quoted directly.

### ***Questionnaire Data***

Responses to Questions 1, 2 and 3 provided data to answer Research question 1 : *What provisions exist currently in New Zealand ?*

#### **QUESTION 1**

#### **COURSES WHICH FOCUS ENTIRELY ON CWSA**

##### **COLLEGE A**

The respondent said there was a 50 hour, one full semester course *Catering for CWSA Within the Classroom* offered to 3rd and 4th year students in the B.Ed and Diploma courses. Forty students took the course in 1994 and fifty one took it in 1993. The reduction in numbers was due to a timetable clash for some students with a compulsory education paper. The College roll in 1994 was 1140.

The course content consisted of :

*Course introduction, analysis of course content in relation to students needs and prior learning.*

*Introduction to terms CWSA/G&T/CWSN*

*Characteristics of these children and methods of identification within the responsive environment*

*Observational focus for T.E., sharing strategies seen on T.E.*

*Acceleration/Enrichment in relation to the needs of CWSA - link to the Curriculum documents*

*Introduction to theories and methods of extension/enrichment. Analysis of these in relation to NZ classrooms*

*The Responsive Learning Environment - Learning centres, Creative Problem Solving*

*Cultural views of Special Abilities*

*Personal teaching of CWSA and resources, personal philosophy and action plan*

Two assignments were required, one based on theoretical understanding, the other on practical application.

#### COLLEGE B

The respondent said there was no course which focused on CWSA in terms of the way special abilities had been defined on page one of the questionnaire, but said the College offered *courses on gifted children and other courses that include topics on children with special abilities.*

#### COLLEGE C

One respondent indicated that there was no course which focused entirely on children with special abilities. The other three respondents did not fill in Question 1.

#### COLLEGE D

Question 1 was not filled in.

#### COLLEGE E

One respondent reported that there was a compulsory component of the Education Studies course for 3rd years, consisting of four two hour sessions. Another respondent indicated that there was no course which focused entirely on CWSA, and the other did not fill in Question 1.

#### COLLEGE F

The respondent said there was an optional course, *Children With Special Abilities*, for 300 level students, consisting of 24 hours content and a practicum in schools. 23 students took the course in 1994. The College roll was 631.

The rationale for the course was :

*Children with special abilities are a group with special learning needs, who, historically, have been disadvantaged in the New Zealand education system. This course aims to provide students with the knowledge and skills necessary to effectively work with these children in mainstreamed settings.*

The course content covered the following topics :

*Evaluation of past and present provisions for the education of children with special abilities in New Zealand.*

*Characteristics of children with special abilities.*

*Methods for identifying and analysing children's interests.*

*Developing pupil profiles.*

*Contemporary approaches to curriculum planning.*

*Developing an educationally defensible curriculum for children with special abilities.*

*Planning, implementing, monitoring and evaluating a school-based tutoring project with a child identified as having special abilities.*

*Resource and support networks.*

*Issues relating to the education of children with special abilities.*

Assessment was achievement based. Work at College and in schools was assessed against criteria supplied at the beginning of the course.

The stated learning outcomes were as follows :

*By the end of the course students will be able to :*

*demonstrate knowledge of the nature of giftedness and of the characteristics of children who have special abilities*

*demonstrate skills in identifying children's specific abilities and interests*

*develop and justify a curriculum based on the assessment of a child's abilities and interests*

*demonstrate a range of teaching approaches which challenge children to engage in higher-order thinking*

*demonstrate knowledge and use of community resources including parents/caregivers*

*demonstrate knowledge of current issues relating to the educational provisions for children who have special abilities*

**QUESTION 2****COURSES WHICH INCLUDE SOME COMPONENTS IN THE TEACHING OF CWSA**

All six Colleges indicated that components on CWSA were included in one or more courses of the following kinds :

Professional/Educational Studies

Curriculum Courses

Special Needs Education

Selected Subject Studies

Maori/Multicultural Studies

Teaching Experience

A component of all courses

The amount of time devoted to CWSA and the ways in which the topic was incorporated into various courses, were outlined as follows: Because Question 2 was responded to in varying degrees, in some cases comprehensively, in others by only one curriculum area, the amount of information shown differed from College to College.

**COLLEGE A****PROFESSIONAL STUDIES**

In Professional Studies, the content related to CWSA was closely linked to the CWSA paper.

**CURRICULUM COURSES**

In most or all Mathematics courses, CWSA would be addressed in some philosophical manner. In the 2nd year courses, the philosophy behind it aligned with CWSA philosophy, but not as a specific component. The 3rd year 50 hour, semester long course, spent approximately 12 hours considering CWSA.

A 2nd year, one semester, Health in Action course spent approximately 4 hours on considering CWSA.

In Social Studies courses, CWSA were focused on in a general manner, for example looking for and helping students to recognise higher levels of thinking.

## COLLEGE B

### PROFESSIONAL STUDIES

Within Professional Studies, several hours in each year of the programme would be on CWSA.

### CURRICULUM COURSES

All curriculum courses referred to CWSA but it was stated that it was very difficult to specify how many hours were involved. There were numerous courses.

### SPECIAL NEEDS EDUCATION

Within Special Education, a Year 2, 20 week course, *Individual Differences*, considered CWSA and in Years 3 and 4, a 16 week course was offered on gifted children with approximately 100 students taking the course in 1994.

### TEACHING EXPERIENCE

Some aspects were learned during teaching practice by looking at school policies and practices.

## COLLEGE C

### PROFESSIONAL STUDIES

Professional Studies, which all students undertook, accommodated special abilities through teaching the generic skills across three years, through exploring the historical context of addressing special needs and abilities and by investigating controversial approaches to special abilities in order to critically appraise philosophies, practices and issues.

Two hours out of an 85 hour Professional Studies course in the 3rd year was devoted specifically to CWSA. Issues related to CWSA were also raised in discussing equity and classroom management, in programming in reading and language, in assessment and identification of children with special teaching needs, in discussing individual differences and in discussing

grouping and peer tutoring. Some students chose CWSA as their research topic.

### CURRICULUM COURSES

In music curriculum courses offered to all 2nd and 3rd year students, approximately 3 hours out of 50 were spent considering CWSA.

### SPECIAL NEEDS EDUCATION

A module in the 3rd year on special needs was delivered by the post-Diploma Special Teaching Needs students, within professional studies courses.

Some students elected to take a subject study in the 2nd year. This consisted of a College/University paper *Education of Exceptional Students* and an associated curriculum paper, *Special Education Curriculum*. Within these papers, some students elected to undertake personal study into the area of CWSA.

### SELECTED STUDIES/SUBJECT STUDIES

Personal development subjects, or Subject Studies, were undertaken by all students across their three year programme, by taking a minor and a major subject study. In these studies, they developed knowledge and skills at a personal level and through an associated curriculum paper, they also developed some expertise in teaching in that area. Components of these courses addressed the individual needs of children, including CWSA. The subject study in Special Education referred to in the section above, was taken as a one year personal development subject.

In the Music subject study, approximately 2 hours were spent considering CWSA in the 1st year, with 4 hours in each of the 2nd and 3rd years.

For the 3rd year selected studies in Social Studies and Mathematics, 4 hours out of 50 were devoted in each to consideration of CWSA.

### TEACHING EXPERIENCE

Student teachers experienced CWSA while on postings in schools, and observed and participated in programmes that were developed to cater for their individual needs.

## COLLEGE D

### CURRICULUM COURSES

Teaching processes and content endeavoured to address students with special movement abilities in an integrated way. The 3rd year compulsory course in Physical Education directly included sessions on equity issues, including extending children who are gifted.

## COLLEGE E

### PROFESSIONAL STUDIES/EDUCATION STUDIES

As part of a 3rd year compulsory Education paper of 200 hours, approximately one quarter of the course was spent on CWSA, with one assignment, and one out of four compulsory examination questions on this topic.

Fifty per cent of a 100 hour Professional Studies course in the final year was devoted to CWSA.

### CURRICULUM COURSES

In all courses offered in English, consideration was given to identifying children's needs and providing programmes to meet them. It was stressed that programmes in English needed to be stimulating, varied and flexible so that children's special talents could be identified and catered for.

### INCLUSION OF CWSA IN ALL COURSES

In all courses students were taught to teach to the needs of individual children. This incidentally covered teaching children with special abilities.

## COLLEGE F

### PROFESSIONAL STUDIES

CWSA were considered under the heading of providing for individual differences.

## CURRICULUM COURSES

CWSA were considered under the heading of providing for individual differences in each curriculum area.

### SPECIAL NEEDS EDUCATION

At the 300 level, CWSA was considered in approximately 20 hours out of a 168 hour special education course. 18 students took this course in 1994.

### MAORI/MULTICULTURAL STUDIES

CWSA were considered in providing for individual differences. The number of hours devoted to this topic was unknown.

## QUESTION 3

### UNIVERSITY PAPERS UNDERTAKEN BY STUDENTS ON TEACHING CWSA

#### COLLEGE A

None

Students were directed to a distance education university course, once they had graduated.

#### COLLEGE B

300 level *Gifted Children* - 100 students in 1994

200 level *Individual Differences* - 210 students in 1994

#### COLLEGE C

*Teaching Children With Special Abilities* was available, but very few enrolled while still at College. Students took the paper after three years of College training, while completing a B.Ed at university. 59 students took the course in this way in 1994.

#### COLLEGE D

No information was filled in.

#### COLLEGE E

300 level *Inclusive Education* - 40 enrolled in 1994

## COLLEGE F

None

## QUESTION 4

Question 4 sought information to address Research question 2 : *What rationale, philosophy or research base guides these provisions ?*

## COLLEGE A

*We take a developmental focus recognising the need for a range of on-going identification strategies within the responsive environment. A key focus within the course is Renzulli's Enrichment Triad and integration of Bloom's Taxonomy within Type III of the Triad. This is linked to current curriculum documents.*

*Depending on the prior knowledge of the group I introduce other curriculum frameworks such as Feldhusen's Model, this supports the Enrichment Triad. The title of the course is "Catering For CWSA Within the Classroom" and in line with much of the current literature we focus on the responsibility of the classroom teacher in designing a responsive learning environment so that CWSA can be catered for within the classroom. School wide enrichment strategies are also covered.*

## COLLEGE B

*The rationale is that it is essential for student teachers to know about the characteristics of CWSA and then be able to make provisions for them in classrooms. The theoretical rationale is based upon the assumption that CWSA need to have their abilities extended and developed.*

## COLLEGE C

Respondent 1:

*In Prof ( Professional Studies ) we take the view of non-categorization and teach the practice of providing maximum opportunity for any child displaying special abilities a la Vygotsky i.e. excellent tuition, in a manner similar to the tohunga/special child concept. If cwsa are not having their status met then they require curriculum adaptation as would be the case if any stns ( special teaching needs ) are not met.*

Respondent 2:

*M.Phil (Ed) which focused on Music and Special needs/Music Therapy including research thesis "The Effect of Music Therapy on Motor Control of Children with Cerebral palsy". Special abilities was part of the research base ( one child was in this category ).*

*Consistent reading of research literature and conference attendance.*

COLLEGE D

Not answered.

COLLEGE E

Respondent 1:

*Research articles of Neil Reid, Donald McAlpine, Betts, Bireley & Hoehn, Cellerino & Story, Hanson Silver, Howley, Howley & Pendarvis, Marker, Reis Hebert, Richardson,E*

Respondent 2:

*There are gifted children in every class who often go unidentified. Teachers definition of Children with special abilities should be broadened to ensure the whole range and diversity of children's talents is included.*

COLLEGE F

*Considers a variety of theorists but practical work is based on Renzulli approach*

## QUESTION 5

Question 5 sought answers to Research question 3 : *What factors limit the type and amount of provision ?*

COLLEGE A

*In reference to the course Catering For CWSA Within the Classroom : The allotted time for this course is too short ( i.e. 50 hours ) because of the need for a good theoretical understanding prior to beginning the practical work with children.*

*The 4 week T.E. ( Teaching Experience ) also places limitations on the "flow" of the course although I have catered for this by building into the course an*

*observational focus for T.E. and sharing of strategies seen with CWSA after T.E.*

*Student evaluations also state the course is too short ( perhaps I am trying to put too much in but it all seems so important based on my personal classroom experience ).*

#### COLLEGE B

*The most crucial is that in a primary pre-service programme, there are scores of things competing for inclusion in the programme. There is too little time to include them all.*

#### COLLEGE C

*Teacher confidence, time - pressure in large classes, awareness of ways to extend - towards children with special abilities.*

#### COLLEGE D

Not answered

#### COLLEGE E

In regard to the Education Studies course of four 2 hour sessions :

*The length of the course - if longer it could be more practical i.e. give the students useful ideas and ways of working with CWSA.*

In regard to the 3rd year Education paper, where CWSA is one third of the course:

*Most other topics for this course include a session with parents involved in the type of provision being studied. In recent years there has been no specific voice for gifted children in this area and therefore students have not heard the consumers voice.*

#### COLLEGE F

- 1. Restrictions on numbers of courses students may take with EFTs funding.*
- 2. Staffing available within EFTs funding.*
- 3. Student perceptions of CWSA*
- 4. Market ( job advertisements ) expectations which feature CWSA.*

## OTHER COMMENTS / INFORMATION RESPONDENTS WISHED TO ADD

The following comments are from the questionnaires or attached letters :

### COLLEGE A

In regard to the course, *Catering for CWSA Within the Classroom* :

*It is a very popular course and I am pleased that many students who choose it as an option are from a range of cultural backgrounds. Student feedback is most positive with comments from written evaluations such as :*

*This course has given me a complete teaching philosophy which I can relate to.*

*I've learnt to respect children's ideas.*

*It provides us with the tools and expertise to carry through a programme for C.W.S.A.*

Referring to the Education Studies compulsory course :

*Personally I have a concern that maybe our students see catering for cwsa as more of the same. ( This view would change in the 3rd year compulsory course ).*

### COLLEGE C

*Some communicated to me that the specific content addressing special abilities may not be as developmentally appropriate early in teacher education programmes. Others wanted to express their views regarding the essential aspects of special abilities which are generic to teaching, and that these generic skills did not appear to be able to be captured in the questionnaire. (covering letter )*

### COLLEGE D

*Te Wahanga Maori does not offer a course at pre-service level that caters for teaching Maori children with special abilities.*

*However it is worthwhile considering such a course in the near future or even incorporating a component of CWSA in our existing MS 300 level course.*

*Such a study would include teaching Maori children with special abilities in the following areas :*

- . culturally valued abilities in te Reo Maori, Tikanga Maori, dance e.g haka, taiaha, waiata etc.*
- . Marae protocol, whaikorero etc.*
- . tribal knowledge/history*

*. visual & performing arts*

### **Summary**

The answers to Question 1 on courses which focused entirely on children with special abilities were not always clearcut. Although College A answered in the affirmative, the course referred to is actually a component of a larger course. College B, while saying there was not a course on special abilities, said they did have a course on gifted children. Colleges A and F had separate elective courses on children with special abilities.

All Colleges did include components on teaching children with special abilities within other courses, with those most often mentioned being professional and educational studies, curriculum courses, and special needs education. Also mentioned were selected subject studies, Maori and multicultural courses and teaching practice, as well as children with special abilities being a consideration in all courses.

Two universities provided papers on children with special abilities or gifted children, and two provided papers which included children with special abilities under the umbrella of inclusive education or individual differences.

The rationales guiding the type of education given to students on teaching children with special abilities centred on the need to both recognise and make provision in the classroom setting for the needs of these children. Some mentioned specific research models and New Zealand and overseas writers in the field.

Factors limiting provisions included the lack of time due to the need to include so much in a pre-service programme, the length of courses, the timing of teaching experience blocks and the lack of input from parents. One respondent believed that the availability of a university course on children with special abilities and the fostering at College of a predisposition to provide the best opportunities for children with special abilities, meant that limitations were not placed on students.

## ***Phase 2 : Interviews***

Core questions 1, 2, 3 and 5 asked for the views of respondents. Data is reported in such a way that similarities, differences and range of responses can be noted.

Because Question 4 asked mainly for information, responses are reported College by College. This data is later added to questionnaire data in order to outline profiles of provisions at three Colleges.

As a large amount of data was gathered from the interviews, responses to questions are summarised. Direct quotations are also used to capture the "feel" of what a respondent said, particularly on philosophical issues.

### ***Core Interview Questions***

Questions 1.1 and 1.2 were asked because the literature review had revealed differing opinions on whether a consideration of children with special abilities should be included in a pre-service programme, or to what degree the topic should be considered, and some of the literature favoured placement of it towards the end of a training course.

#### **QUESTION 1.1 : DO YOU THINK THAT GAINING AN UNDERSTANDING OF THE NEEDS OF CWSA AND HOW TO CATER FOR THEM IN THE CLASSROOM SHOULD BE INCLUDED IN A PRE-SERVICE EDUCATION PROGRAMME?**

All eight respondents answered in the affirmative. Five of them qualified this with stronger statements, such as *No question about it* or *I think it's essential*. Seven of the respondents went on to give reasons to support their answers, or to express some reservations.

Reservations were expressed by two respondents. One believed that teachers in the beginning years were unlikely to be able to cope with individual differences, because they were in survival mode, concentrating on learning to control the class. Experience brought with it the ability to cater for individual needs. Thus, there was the dilemma of the need to prepare teachers to cater for different abilities, and the fact that they may not yet be

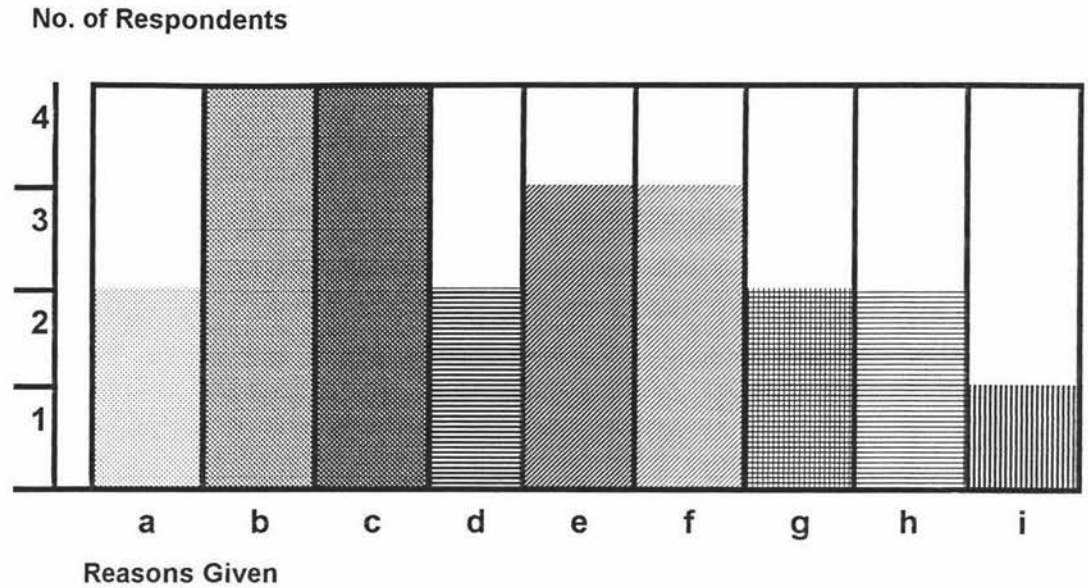
ready for that, as well as the question of whether in a generic pre-service qualification, specialist skills should be given. The other respondent believed

that initial teacher education can give basic skills and awareness of strengths and needs but the specifics of developing individual plans and programming to meet those needs can come later. Teacher professional development should be the main thrust.

Neither of the people expressing reservations directly taught a course on children with special abilities.








Reasons given for believing that a consideration of CWSA should be included in pre-service programmes fell into the following categories :

- a. Personal experience - knowledge of the need to cater for CWSA, through the respondents' own teaching experience
- b. Regular classrooms being the norm - the reality of teaching in regular, mixed ability classrooms
- c. A responsibility to cater for individual differences and needs
- d. Recent documents point to the necessity of catering for individual needs
- e. The need to cater for a range of abilities
- f. The need to have an understanding of what special abilities are
- g. The need to change attitudes and destroy myths and stereotypes
- h. The need to equip student teachers with skills and strategies to cater for CWSA
- i. Learning about issues regarding CWSA, contributes to students developing a whole philosophy of teaching, to apply in general.



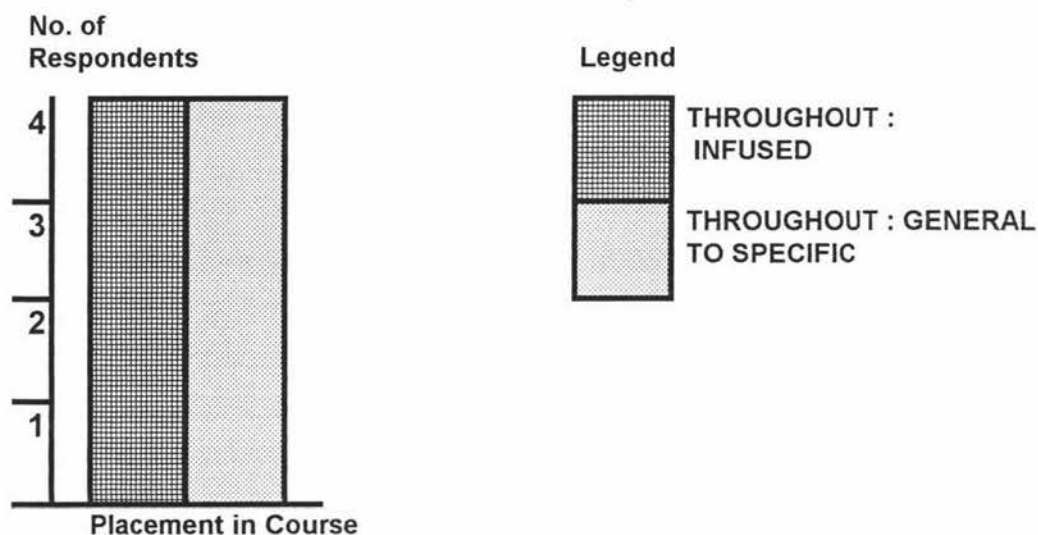
**FIGURE 1 : REASONS GIVEN FOR CWSA BEING INCLUDED IN A PRE-SERVICE PROGRAM**

**Legend**

-  a Personal Experience
-  b Regular Classroom Teaching
-  c Individual Differences
-  d Recent Documents
-  e Range of Abilities
-  f Understanding Special Abilities
-  g Change Attitudes
-  h Skills and Strategies
-  i Philosophy of Teaching

**QUESTION 1.2 : SHOULD THIS AREA BE INTRODUCED THROUGHOUT THE COURSE, EARLY IN THE COURSE, OR TOWARD THE END?**

All of the respondents believed that an understanding of CWSA should be addressed throughout the course. Some said it should be infused into curriculum and other courses, while others saw it being introduced in a general sense early on, with more specific knowledge being developed later.



**FIGURE 2 : WHEN AN UNDERSTANDING OF CWSA SHOULD BE INTRODUCED IN THE COURSE**

Those who wished to see the topic infused throughout the course outlined the following reasons and means of implementation :

- a. All courses, particularly the curriculum courses, should deal with children of varying abilities and characteristics.
- b. All subject areas should address the issue of adapting the curriculum for CWSA.
- c. It should be discussed in the same way as any other children with special needs are discussed throughout the course, so it is not seen as something special. Thus it should be injected, but highlighted every now and then.

- d. It should be looked at in terms of learning outcomes - what should beginning teachers be able to do? We want them to be able to identify the learning needs of children and generate programmes for them, as well as deal with groups and the classroom situation. It can be infused in courses with lecturers giving examples. Being able to choose to do a selected study in special education also provides another means of addressing CWSA.

Both Directors of Primary Education said that the amount of input on children with special abilities which individual lecturers infused, is impossible to monitor. There was an expectation and an assumption that the topic was being covered. One said it depended on the knowledge and experience of the lecturer.

Those who favoured introducing CWSA early on, all agreed that it would be in the general context of individual needs and an understanding of the concept of special abilities, with specific knowledge and skills being introduced later on. One respondent particularly favoured placement of specific knowledge and skills towards the end of the course because students are more likely to use what they have learnt most recently. Another believed that leaving it to the third year left too much to cover, and it could also be infused into curriculum areas in the first and second years. Both of these respondents taught specific courses on CWSA.

**QUESTION 2.1 : WHAT OVERALL PHILOSOPHY OR RATIONALE IN YOUR COLLEGE GUIDES THE WAY IN WHICH PRIMARY SERVICE STUDENT TEACHERS RECEIVE EDUCATION IN TEACHING CWSA? OR DOES IT VARY DEPENDING ON THE DEPARTMENT CONCERNED?**

Five respondents believed there was a general philosophy. One qualified that by saying it was not necessarily always put into practice, and the philosophy would vary with departments.

Those who said *no*, or *don't know*, believed that philosophies varied from individual to individual.

Three respondents expressed reservations about knowing what the philosophies and practices of others were.

#### THOSE WHO BELIEVED THERE WAS A GENERAL COLLEGE PHILOSOPHY :

One Director of Primary Education said :

*... we do have some statements of philosophy where we base our programmes on principles such as encouraging our people to learn how to deal with children of all kinds. That's firmly written into our principles which underlie the programme. And that they should have experience in dealing with children at all levels in terms of age differences and characteristic differences.*

Another Director of Primary Education :

*Well, I think it's a question of saying, what are the learning outcomes? ... what are the outcomes you want in terms of a beginning teacher? ... Now we want beginning teachers to be able to, in an individual sense, to be able to identify the learning needs of children, to be able to generate programmes which help them develop their learning and so on. As well as, we want them to be able to deal with groups, as well as your classroom situation, as well as work in the school context, as well as work within the community context ... Many of the learning outcomes are generic, in my opinion... And then one has to ask, are those skills beyond that, called specialist skills - the question is, do we give specialist skills at the pre-service level? ... I'm not saying we don't, but it does raise that sort of tension - how far do you go? And how much is necessary at the beginning stage?*

As well as the generic aspect, the respondent believed the College had a strong emphasis on specialism for students at a personal level, in curriculum areas. Special education can be a specialist area also but has not been developed to the same extent as subject studies.

A Head of Professional Studies at the same College believed that students' stated philosophies at the end of their 3rd year reflected the College view. The students *gave indications as to what their priorities were regarding children over all, and the thing that impressed us was they were very child focused, not programme focused, and being child focused they... (well, they were articulating this, anyway) they were articulating that they thought the needs of the children were the things they had to meet first and that to us was*

*heartening because they were including all kids... In this College there's a fairly strong equity notion that comes through that directs students to become focused on the needs of individuals.*

The respondent believed that the Professional Studies department's view of non-categorization was fairly widespread in the College. This meant that when working with children with special needs, the child is perceived first as a person and then the needs are looked at in the same way as they are with any other children. If a special programme needs to be developed, then it is developed, not because you categorize or label the child as gifted or talented, but because they have some special needs and you want the learning potential maximized.

The Head of Special Education at the same College believed there was a generalized College view *that learners should be taught as individuals*, which requires a learner based as opposed to a teacher based philosophy.

A lecturer in education, who taught a course on CWSA, believed that the College supported the course philosophy which taught students to cater for CWSA within the classroom context. The lecturer also provided other lecturers with background on the philosophy being put forward in the course. *So I think there's a general kind of philosophy but I'm not sure what each department or curriculum area is doing with a great deal of depth.*

#### *THOSE WHO BELIEVED THERE WAS NOT A GENERAL COLLEGE PHILOSOPHY :*

One said, *...there's certainly no unified approach, and I don't think we'd be any different to most in the diversity of knowledge, the diversity of attitudes here.*

Another said, *I doubt that there is an overall philosophy relating to CWSA. It seems to be something of a controversial area. There tends to be a divergence of approach, conflict over what is the best way to meet the needs of these children.*

## THOSE WHO DID NOT KNOW :

The one respondent who did not know, said *...A lot of what goes on here reflects the individual lecturer's own either philosophy or experience or knowledge and I guess what I have to say is each person brings their own view to bear and I imagine that like within any group in this College there would be a range of perspectives on this topic.*

## DEPARTMENTAL PHILOSOPHIES :

Some commented on their own or their department's philosophy.

One Special Education department had made a conscious decision not to include CWSA in their courses. *It is a bit of a dilemma for us, whether to have it in or not. One can take the thought these are exceptional children, therefore if our brief is enskilling teachers to work with the range of exceptional children then we should address CWSA. But then if you interpret our brief as enskilling teachers to work with children with learning difficulties and disabilities or health concerns, there's so much to be covered, you opt out of CWSA, as we've tended to do.* The respondent qualified this by saying that if students asked for something on CWSA, like they had done last year, someone was invited in to provide lectures, and this aspect had been included again this year. The department's philosophy was looking at all children as individuals, driven by the strengths/needs approach, so that teachers become aware of what is needed and have the responsibility to seek support if they do not have the requisite skills themselves.

A Head of Department in another Special Education department held a philosophy based on the needs of the learner as opposed to the needs of a teacher and believed that a good school is able to cater for all children and for that they need a sound understanding of needs and how best to meet them. Teacher education has to prepare teachers to cater for the range they will inevitably have in a class, which includes gifted children, on a needs basis, rather than on the notion of three groups.

Another lecturer in the same Special Education department explained that students were introduced to different models or approaches underlying special education. Lecturers particularly favoured an ecological approach,

and individual needs being addressed through IEPs. Categorization was only introduced in the course when specific aspects of exceptionality were considered. Giftedness was one of these aspects of exceptionality.

Overall, there was no consensus between those interviewed within any one College, that a general philosophy prevailed.

### **QUESTION 2.2 : HAS THE PHILOSOPHY CHANGED OVER TIME OR HAS THIS VIEW HISTORICALLY PREVAILED HERE?**

It was not always appropriate to ask this question, especially if the respondent believed there was no generalised philosophy or did not know, or indicated that they had not been at the College long.

One respondent thought the philosophy of having teachers who were interesting, liberal thinkers, along with the idea of specialism, had been prevalent in the College for a long time, with such people as artists, scientists and poets being employed by the College. Change was occurring, however, due to pressures from outside, with the imposition of the New Zealand Curriculum and the accountability of vocational training which emphasises what one can actually do.

Another commented that the present approach to education of the gifted is also an historic one, being centred on a few interested people who have made this an area of particular interest, attention and advocacy. It was felt, however, that there was a general lack of advocacy.

### **QUESTION 2.3 : IN WHAT WAYS MIGHT THIS PHILOSOPHY BE REVIEWED OR MODIFIED?**

This question was not asked due to answers given to questions 2.1 and 2.2. Either there was no generalised philosophy in the opinions of the respondents; dilemmas or satisfaction with present philosophy had already been expressed; or modifications, such as responding to students' wishes for the inclusion of the topic of CWSA, had been outlined.

**QUESTION 2.4 : WHAT INFLUENCE DO SCHOOLS HAVE IN THE EMPHASIS GIVEN HERE TO THE AREA OF SPECIAL ABILITIES?**

Four respondents, in answering this question, began by stating that schools do have a big influence on the overall College programme.

In terms of influencing the emphasis given in College to children with special abilities, five said schools had some degree of influence, although it was not of an overt nature, and three said that schools had not sought to influence the Colleges on this issue. Three answers also reflected the notion that the influence can be in the opposite direction - either through College personnel providing professional development to teachers in this area, or through student teachers being asked to work with CWSA in classrooms, thus creating awareness and a form of staff development for teachers.

Ways in which schools have an influence on the College were given as follows :

Schools wish students to have expertise in this area, due to the reforms in education, and so a qualification in CWSA had good "market place" value for a beginning teacher.

Schools also influence College practice through students observing in classrooms what is happening, either positively or negatively, for CWSA, and discussing it back at College. This can lead them to choose CWSA as a workshop topic in Special education or essay topic in Professional Studies.

Another sphere of influence is new staff who have had experience with CWSA, coming to Colleges from a recent primary school teaching background. They infuse the topic of catering for special abilities into their courses, and produce related resources.

Those who thought schools had not influenced the Colleges in this area, said that although schools have a large impact on programmes in general, many schools do not see catering for CWSA as a priority due to such things as keeping up with changes in curriculum or catering for children with disabilities. Another reason suggested was that schools may have an appreciation of the generic nature of pre-service education.

One Director of Primary Education said the requests from schools had been for such things as technology and Maori language for students, and the other Director of Primary Education said the major issue for schools was the College giving student teachers enough time to learn how to teach all of the areas of the curriculum.

### **QUESTION 3.1 : WHAT FACTORS LIMIT THE TYPE OF PROVISION OR AMOUNT OF TIME DEVOTED TO TEACHING STUDENTS ABOUT CWSA?**

The majority of the limiting factors mentioned revolved around matters related to one another - a full or crowded programme, not enough time, new courses, demands of the new curriculum, and pressures to fit in more from outside of the College.

A point often mentioned was the crowded nature of the primary pre-service programme. If something else compulsory went in, it either had to go in on top of everything else, at the expense of something else, or courses had to be redesigned to incorporate the additional factors. Some mentioned that new curriculum related demands such as the Curriculum framework and Maori language had come in, but nothing had gone out, and there were increased demands from outside groups for sex education, traffic education, drug education, peace studies, driver education and other types of education.

Time to focus on CWSA within existing general courses or specific CWSA courses, was also seen as limited. There was an attempt to fit in too much. One teacher of a 50 hour course on CWSA said the students' evaluations were very positive about the course and the practical work, but they all said they wished they had more time. One Head of Special Education said CWSA was not emphasised in their courses due to not being able to cope with all they should be doing to enskill their students.

One respondent commented ... *we are affected by the crowded nature of the primary school. Pressure is on us to provide just about everything under the sun for our students while they're here in the teacher education programme. Clearly we cannot. Therefore that's why I say I'm somewhat disappointed about the extent to which we can run, say, compulsory courses in dealing with CWSA. Our capacity to do that, as much as we ideally would like, is limited.*

Other factors mentioned were :

- a. Teaching Experience blocks interfering with the flow of a course, or coming at the wrong time for students to work with CWSA - either after the course, or too early before they have enough background.
- b. Not having ready access to enough children in schools, during compulsory courses where numbers of students are large.
- c. A lack of mandate from the Ministry to address the topic of CWSA.
- d. Parents of CWSA were not a strong action group and had not been sufficiently politically active to bring about better provisions for CWSA.
- e. Attitudes were a limiting factor, because many do not see the needs of CWSA as an overt need as compared with a child who cannot read or is in a wheelchair, and believe these children are already advantaged, and giving them any more is unjustified.
- f. Insufficient links being made between assessment practices discussed in special education courses and those in curriculum subjects, due to shortage of time and lack of experience of special education lecturers in certain areas of the curriculum.
- g. A ceiling being placed on numbers of students in CWSA courses. One respondent said the College had to limit numbers in the specialist course due to being the only lecturer with a strong background in gifted education.

Figure 3 shows the number of respondents who referred to the various limiting factors.

Some of the respondents alluded to ways in which limitations could be overcome.

One was the opportunity for students from one College to take a university paper on CWSA in their fourth year, thereby getting more input in this area than they could at College. This was encouraged and many did take the

paper. Those taking a Special education course at College were statistically more likely to take this option.

Redesigning courses to include CWSA was seen as a more viable option than trying to fit in a new compulsory course on CWSA. One respondent said *...CWSA reflect a factor that is present in all schools anyway and it needs to be addressed and therefore it needs to be included in such things as special needs courses, professional studies courses, curriculum courses, and then subject studies courses. In addition to that, however, if you want teachers who will take professional leadership in that field, you also have to offer particular courses, and I believe that should be an option that a student has.*

Offering special needs or special abilities courses without a ceiling on the number of students or offering more optional courses would allow more students to learn about CWSA.

Having special education as a selected study which included a curriculum and a university paper was seen as a strength by the lecturers involved, because it provided both theoretical background and an opportunity to apply it. Having it run over three years would be a way of making links between assessment practices in special education and curriculum areas.

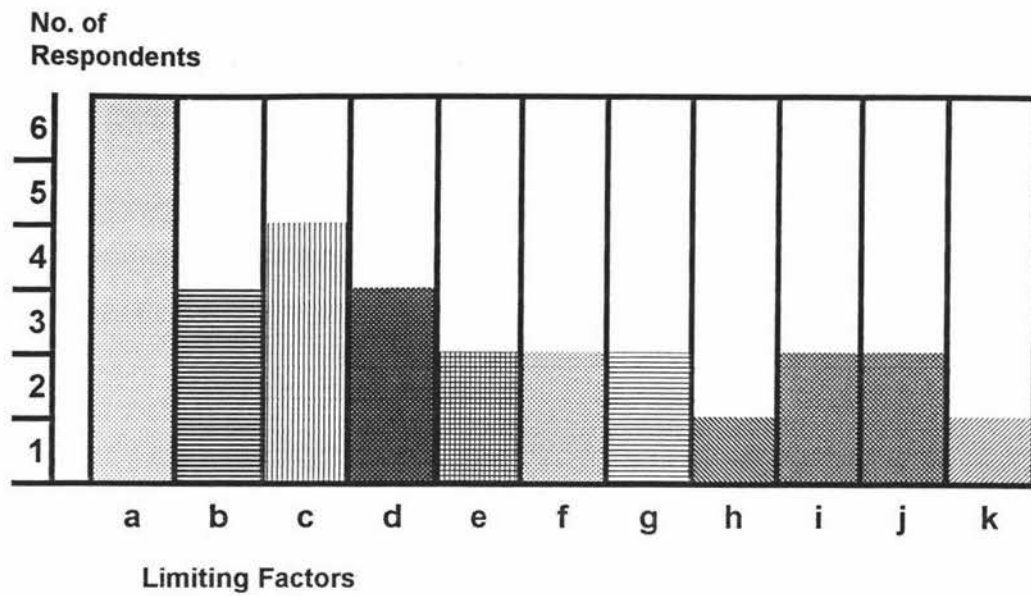
It was stated that College curriculum courses like mathematics and science, were starting to have to address the topic of CWSA because of the new national Curriculum.

Having Teaching Experience in the same class, twice, so a student can work in depth with an individual during the second section, provided continuity.

Videos were mentioned by three respondents as being the next best thing to access to children in classrooms.

Having students who study CWSA in classrooms spread around groups for sharing information with other students when back in College, was seen as a way of disseminating awareness further.

Professional development for teachers through courses offered by a College would indirectly help students to become more aware of CWSA when on Teaching Experience, because teachers would be more aware.



**FIGURE 3 : FACTORS WHICH LIMIT THE TYPE OR AMOUNT OF PROVISION ON CWSA**

**Legend**

-  a Full Programme
-  b Lack of time in Specific Courses
-  c Increased Curriculum Demands
-  d Demands of Outside Groups
-  e Lack of Mandate from Ministry
-  f Lack of Experience of Lecturers
-  g Ceiling on Number in Courses
-  h Timing of Teaching Experience
-  i Lack of Access to Children
-  j Attitudes
-  k Lack of Advocacy of Parents

#### QUESTION 4 : STUDENTS' PRACTICAL TEACHING EXPERIENCE IN SCHOOLS

##### QUESTION 4.1 : ARE ANY SPECIFIC BRIEFS OR ASSIGNMENTS GIVEN TO STUDENTS REGARDING TEACHING, INTERACTING WITH OR OBSERVING CWSA?

###### COLLEGE A

There was an assignment and an observation brief in the course, *Catering for CWSA Within the Classroom*.

There were none given in Special Education courses.

###### COLLEGE B

There were no specific tasks on CWSA set in the teaching practice handbook.

There were none given in the *Individual Differences* course, due to large numbers of students.

Within Professional Practice and curriculum briefs there was a focus on children of differing ability.

There was an optional research component in schools in the *Gifted Children* course.

###### COLLEGE C

There was the opportunity to choose to work with CWSA within the Special Education curriculum paper.

There was also the chance to do so within Professional Studies.

None of the Colleges had specific briefs or assignments on CWSA for all students while on Teaching Experience postings. Opportunities for students to focus on CWSA were provided as options within special education, gifted education, professional studies or curriculum briefs, or in one case as a requirement within a CWSA course.

## **QUESTION 4.2 : HOW DO YOU SEE TEACHING SECTIONS CONTRIBUTING TO STUDENTS' KNOWLEDGE AND UNDERSTANDING OF TEACHING CWSA?**

This question did not need to be directly asked as the information was volunteered in answer to Question 4.1. The ways in which the Colleges provided knowledge and understanding of CWSA through teaching sections were outlined as follows :

### **COLLEGE A**

*Catering for CWSA Within the Classroom* - The Teaching Experience posting occurred after two sessions of the course. Students observed while in classrooms, then shared and discussed activities they had seen in light of acceleration and enrichment. Near the end of the course the students went into schools for four teaching blocks to do a practical assignment. They each worked with a child, ascertaining needs and planning and teaching something within the class unit. Sometimes the students went to one particular teacher who was working with CWSA, or sometimes they went back to a school to work with a child from a previous section.

### **COLLEGE B**

Professional Studies - Students could be asked to focus on particular kinds of children.

Curriculum courses - Students could study a number of children of varying ability from very advanced to very limited ability, within a subject area.

*Gifted Children* course - An optional research component was offered, and this was mostly taken up by practising teachers who had direct access to children.

### **COLLEGE C**

Professional Studies - Students could elect to study CWSA as part of an action research project in the third year. A small number studied CWSA or children with special needs; others chose topics like classroom management because they felt sure they would have management problems but did not necessarily know they would have a child with special abilities in the class.

The students shared their findings as an oral presentation at College.

Special Education Curriculum paper - Second year students went to the same school for their first and second postings. In the first section, they chose a child for a case study and collected information and talked with the teacher.

On the second posting, they developed an IEP, put it into operation and also met with the parents and interviewed them. Not as many students elected to work with CWSA as with children with other special needs, but between one sixth and one third of the class did so. The case study was shared with other students, back in College.

#### **QUESTION 4.3 : IN WHAT WAYS MIGHT SECTIONS BECOME MORE FOCUSED ON THE AREA OF CWSA?**

In some cases this question was directly asked; in others, answers were provided indirectly.

##### **COLLEGE A**

The Head of Special Education said, *I don't think we'd do this in Special Education. I think the place for it is in the Advanced Studies where it could be a requirement.*

The lecturer for the CWSA course said that in regard to Teaching Experience, it worked better when the course was in the first semester, so students could request to go back to the same class and work with an individual child in conjunction with the teacher.

##### **COLLEGE B**

In regard to the *Individual Differences* course : *we would love to have them do work in schools but we have got say, on average, 250 students doing that course. It really is untenable to put them into schools to do work...Because we don't see them after their practicum, they don't come back to the course, it's unrealistic to expect them to do a formal task related to the course while they're on teaching practice. What we hope to do, is to really raise their awareness; we give them cues to look for...*

##### **COLLEGE C**

One respondent said, *...we should be making change according to learning outcome - what is it we want our student teachers to be able to do when they enter into the teaching profession, when they start off as a beginning teacher, and if we want them to be able to be more skilled comparatively speaking,*

*than they are now, when they're working with CWSA, then we need to focus some of the tasks directly at one of them.*

#### **QUESTION 5 : ARE THERE ANY FURTHER COMMENTS YOU WOULD LIKE TO OFFER IN REGARD TO HOW PRIMARY SERVICE STUDENTS RECEIVE TUITION ABOUT CWSA?**

The following information incorporates additional comments made in response to this question or elsewhere during the interview.

##### **IN-SERVICE DEVELOPMENT**

One respondent had noticed while running in-service courses on CWSA for teachers that they had a narrow view of what special abilities were and suggested a teachers' in-service organisation through the College could give teachers better messages than through them attending rather elitist meetings of parents of gifted children.

A pre-service/in-service continuum was seen as a valid idea and a respondent mentioned that at present the Teacher Support Services Special Needs adviser was also on the staff of the Special Education Department at the College. Thus they could identify needs in schools for each other.

Another lecturer suggested teacher training should be widened conceptually from a notion of three years of pre-service training and then in-service training to a career track notion of professional development, and believed that the Qualification Authority would probably see this as a good thing also. The respondent thought that we were locked into inflexible sorts of notions about what one needs to know and when one needs to know it.

All of the above views were expressed by personnel from the same College.

##### **MAORI AND MULTICULTURAL PERSPECTIVES**

Two respondents mentioned that their College was in the process of integrating into courses, research work on Maori CWSA carried out by a College lecturer.

Cultural views of special abilities were a component of a CWSA course at another College. Such people as a Pacific Island adviser, a Maori teacher and a representative from the Refugee Centre were invited in to discuss differing concepts of special abilities. When in schools, the students could choose to work with a child from a different culture. Another point mentioned by the lecturer of this course was that a number of Pacific Islands and Maori students opted to take the course, as word of mouth had spread the message that multiculturalism was an important component of the course.

### COMPULSORY VERSUS OPTIONAL COURSES

One lecturer of a gifted education course used to think a full semester compulsory course would be the ideal, but now believed, maybe because large numbers were being attracted to the optional course, that it was better that those who came in, opted to do so, had positive attitudes, and *go out and make a difference*.

A Special Education lecturer had mixed feelings about the compulsory / optional issue. It was perceived as positive that students came in with openness and positive commitment by choosing to do a course. Conversely, the 1989 Education Act provided *a very strong expectation on employees of the education system to be knowledgeable and to be open minded and supportive of families of children with special needs*. How to reconcile these two things was a dilemma. However, if the courses became compulsory, *something else would have to go*.

Another Special Education lecturer at the same College said there was likely to be expansion in special education, so that every student would have at least a 50 hour course in special education, with CWSA as a component, during their time at College.

A Director of Primary Education would like to see more optional courses on CWSA offered, as well as the one already offered, so that there was a wider range of opportunities for students to take such courses.

### **Summary**

Core questions were asked of the eight interviewees in three Colleges.

All eight respondents believed that gaining an understanding of and catering for the needs of children with special abilities should be part of a pre-service programme. Several reasons for this were given, with the reality of teaching in regular, mixed ability classrooms being the norm and a responsibility to cater for individual differences and needs, being mentioned most often. All respondents believed that an understanding of children with special abilities should be addressed throughout the course, with some seeing it as totally infused into curriculum and other courses, and others seeing it as infused and then introduced in a more specific sense later in the training programme.

Some of those interviewed believed their College had a general philosophy on introducing students to the teaching of children with special abilities and others thought philosophies varied with individuals.

Schools were seen as being influential in various ways on the emphasis given to children with special abilities at College, although not overtly so, but it was also stated that some schools did not see it as a priority area in the way that technology, Maori language or the new curriculum were.

The main limiting factors on the types and amount of provision devoted to learning about children with special abilities, were increasing demands to fit more into a crowded programme.

In no College were all students expected to carry out assignments on children with special abilities while on Teaching Experience postings, but there were opportunities to choose to focus on these children. Teaching postings contributed to students' understanding and knowledge of children with special abilities through observation, discussion back at College, carrying out case studies, developing IEPs, and working with individual children in classrooms.

Teaching Experience becoming more focused on children with special abilities was seen to be dependent on the timing of courses, the availability of access to children, students' awareness of what to look for, and actually focusing tasks on children with special abilities.

Views were also expressed regarding Maori and multicultural perspectives on children with special abilities, the benefits and disadvantages of compulsory and optional courses, and the need for a pre-service/in-service continuum.

Specific questions were also asked of individuals and the responses will be included in the collation of information in the next section.

### ***Phase 3 : Profiles of Provisions at Three Colleges***

Information from the interviews was combined with the questionnaire data from the three Colleges where interviews had been conducted. Answers to specific questions addressed to individual interviewees were included in this collation, along with additional information from course outlines offered by some of those interviewed. The resulting profiles of provisions at each College, follow.

#### **PRESENT PROVISIONS FOR PRE-SERVICE EDUCATION IN TEACHING CWSA AT PRIMARY SCHOOL LEVEL, IN THREE NEW ZEALAND INSTITUTIONS**

##### **COLLEGE A**

A course which focused entirely on CWSA was first offered in 1992. ***Catering for CWSA Within the Classroom*** was a 50 hour, optional, one semester course available in both the first and second semesters to 3rd and 4th year Diploma and B.Ed students, with a maximum number of twenty five in each semester.

The focus was on the responsibility of the classroom teacher in designing a responsive learning environment so that CWSA could be catered for within the classroom.

In the first two weeks of the course, students were introduced to terminology, characteristics and definitions of CWSA and methods of identifying within a responsive environment. They were then involved in a four week general Teaching Experience block in which they were encouraged to observe strategies teachers used with CWSA and these were later discussed in terms of enrichment and acceleration. Theories, strategies and curriculum models

were introduced, with particular emphasis on the integration of Bloom's taxonomy with Renzulli's Enrichment Triad Model, and links were made with curriculum documents. An assignment was set, based on theoretical understanding and curriculum models. Concepts of special abilities in different cultures were introduced by invited speakers.

A practical application assignment where students worked with individual children in schools was then planned for, by drawing a flow diagram of what they intended to do, based on theory already introduced. Students put this into practice by teaching the child, within the classroom unit topic, thus also supporting the teacher. This work was later critically analysed, and part of the assignment was a reflective statement of both process and product.

The course concluded with students considering a personal philosophy and action plan.

The background theory for the course was shared with other professional practice tutors, who may wish to incorporate it into their teaching.

A consideration of teaching CWSA was included in **other courses**. Those specifically mentioned were :

**Special Education** : In the past, the topic of CWSA was not included, but in the last two years a few lectures by invited speakers had been incorporated. Students could opt to present a seminar to classmates on special abilities, but had rarely done so.

**Professional Studies** : In Professional Studies, the content related to CWSA was closely linked to the CWSA paper.

**Mathematics** : 12 hours out of a one semester, 50 hour course in the 3rd year, were devoted to CWSA.

Most or all Mathematics courses addressed CWSA in some philosophical manner.

**Health in Action** : In 4 hours out of a one semester course in the 2nd year, CWSA were discussed.

**Social Studies** : CWSA were focused on in a general manner in all Social Studies courses.

#### COLLEGE B

A course focusing entirely on CWSA had been provided since 1991.

***Education of Gifted Children*** was a 300 level, optional course which up to one half of the students opted to take. Some teachers and other educators also took the course along with the pre-service students.

The course prescription was as follows :

*The content of this course will involve an examination of historical developments in gifted education, a focus on the range of conceptual issues that are associated with the education of learners with special abilities, an analysis of behaviours deemed to characterise individuals of exceptional ability, and a critical evaluation of educational frameworks and curriculum provisions. There will be an emphasis on both New Zealand and overseas research, and an opportunity for course members to undertake an individual research project. Important consideration will be given to bicultural, gender and family/whanau issues.*

Topics were covered in this order :

Introduction & Models/Definitions

History

Characteristics

Intelligence

Creativity

Identification

Educational Provisions & Curriculum Models

Enrichment & Acceleration

Learning Styles & the Development of Thinking Skills

Underachievement

Issues of Class, Culture, Gender & Disability

Parenting the Gifted Child

The course was assessed through :

- a. An oral presentation to a small group of a summary of an article, on three separate occasions. Group response was encouraged.

- b. An essay or a research project. There was a choice of essay topics relating to terminology, history of gifted education, creativity and definitions. The research project was on a topic of particular interest which could be investigated first hand.
- c. A ten minute seminar presentation to the tutorial class on a selected aspect of the course content for that week, along with a written summary of the main points. The latter were collated for students' reference. The seminar was assessed by peers and the lecturer.
- d. Two tests of fifty minute duration based on the course text, readings, lectures and tutorials.

There were components on CWSA within **other courses** :

**Special Education** : A 200 level course, *Individual Differences*, was compulsory for 2nd year students. The course co-ordinator of *Education of Gifted Children* taught a module on CWSA within it.

**Professional Studies** : Several hours in each year of the programme were spent on CWSA. How it was included was left up to the judgment of staff.

**Professional Support programme** : *Creativity* was included as a module in courses made up of optional modules.

**Curriculum Areas** : All courses referred to CWSA.

**Teaching Experience** : Some aspects were learned about through looking at school policies and practices.

Students in the *Individual Differences* course were encouraged to observe practices in schools, ask if there was a policy on CWSA, etc.

#### COLLEGE C

There was no College course which focused entirely on CWSA.

B.Ed students could elect to take a university course, *Teaching Children With Special Abilities*, in their 4th year.

Components on CWSA were included in **other courses** :

**Special Education** : A 2nd year subject study in special education was offered as an option. This consisted of two papers, *Education of Exceptional Students* and *Special Education Curriculum* which were taken concurrently. They were each equivalent in duration to one semester, but were run throughout the year. The numbers were not restricted and about one third of students elected to take the course.

The curriculum paper focused on assessment. Students conducted a case study of an individual during the first posting in a school in the year, and in the second posting in the same school, they developed an IEP and put it into operation, also meeting with the parents. Some students elected to work with a very able pupil, sometimes one who was being disruptive.

*Education of Exceptional Students* was a more academic course designed to be an introduction to the area of special education. Specifically, only a small amount of the course was devoted to CWSA. Gifted/talented was one of the ten topics of exceptionality for research workshops, which students presented in pairs. They also prepared a summary of notes to hand out.

An 18 hour module on special needs was delivered to 3rd year students by the Special Teaching Needs Post Diploma students. All 3rd years, except those who had completed the selected study in special education, took this module. Within it, CWSA were discussed, and in one 2 hour session, CWSA was specifically addressed as an optional topic.

**Professional Studies** : The teaching of CWSA was discussed across three years in relation to generic skills, the historic context of addressing special needs and abilities, appraising philosophies and practices, equity, classroom management, programming in reading and language, assessing and identifying children with special needs, individual differences, and grouping and peer tutoring.

In the 3rd year, 2 hours out of 85 were specifically devoted to CWSA with a range of abilities, characteristics, programming implications and philosophical issues being discussed.

While on postings in schools, 3rd year students focused on one child for an action research project, which they presented orally to the class when they returned to College. They could elect to work with a child with special abilities for this project.

### **Curriculum Studies :**

Those specifically mentioned were:

**Music :** In the 2nd and 3rd years, 3 hours out of 50 were devoted to CWSA. There was some discussion of CWSA in **all subject areas**, including **mathematics** and **reading** in the 3rd year which were taken by all students.

### **Subject Studies :**

**Music :** 2 to 4 hours per year, over three years, were devoted to CWSA.

**Social Studies :** 4 hours out of 50 in the third year were devoted to CWSA.

**Mathematics :** CWSA were considered during 4 hours out of 50 in the 3rd year.

## ***Phase 4 : Overseas Provisions***

This phase addressed Research question 4 : *What are some examples of provisions overseas?*

Personal correspondence with overseas providers and a search for published outlines of programmes, provided the examples reported here. They are mainly primary, pre-service, undergraduate courses but some other examples, such as a secondary pre-service course and a specialised graduate level course for Native Americans have been included because they contribute information relevant to Research question 3 : *In what ways can an understanding of teaching children with special abilities be introduced in pre-service programmes for prospective primary school teachers?* Most of the courses are currently running, but some are past documented courses.

Replies to personal correspondence were received from fourteen individuals involved in teacher education. In several cases, more than one reply was received from an individual, where further clarification or information had been sought. A finding from the literature review ( Clark, 1992 ) that graduate degree programmes only were available in some universities, was confirmed to still be true ( Clark, 1994 ). References to pre-service courses were rare in the literature. A correspondent provided information that only four colleges or universities in the United Kingdom offered courses on gifted education in initial teacher training and these courses were minimal or optional ( George, 1994 ). One of these optional courses is reported in this chapter. The following twelve examples of programmes, shown in Table 2, are discussed in this chapter.

**Table 3 : EXAMPLES OF PROVISIONS OVERSEAS**

<b>University or College</b>	<b>Country</b>	<b>Type of Course</b>	<b>Name of Course</b>
University of Alabama	USA	Pre-service, 5 semester	Multiple Abilities Program
Oklahoma City University	USA	American Indian, M.Ed	American Indian Teacher Training Program
Purdue University	USA	Practicum - teachers & undergrads	Super Saturday Program
University of South Carolina	USA	Practicum - teachers	Summer Enrichment Program & Practicum for Teachers
Middlesex University	UK	Primary and secondary B.Ed Honours option	The Exceptionally Able Child
Armidale College of Advanced Education	Australia	Undergraduate option	Providing for Talent
Charles Sturt University	Australia	Undergraduate option	Working with Gifted Children
Edith Cowan University	Australia	Secondary, undergrad, compulsory	Catering for High Ability ( Gifted and Talented ) Students
Griffith University	Australia	B.Ed (Special Ed) option	Educating Gifted and Talented Chn.
University of New South Wales	Australia	Pre-service option	Gifted and Talented Elective
"		Practicum option	School Attachment - Gifted & Talented
Un-named	Australia	Undergraduate option	Catering for Above Average Pupils

The provisions will be discussed under the following headings:

- A. Comprehensive Programmes which incorporate CWSA
- B. Compulsory Pre-service Courses on CWSA
- C. Optional Pre-service Courses on CWSA
- D. Practicum Courses
- E. Graduate Courses with a special emphasis

### ***Examples of Provisions***

#### ***A. Comprehensive Programmes which incorporate CWSA***

##### **MULTIPLE ABILITIES PROGRAM - (MAP) University of Alabama**

###### **SOURCES :**

Olenchak, F R - Personal correspondence 1994

Ellis, Rountree, Schlicter et al - Course Outline : *The Multiple Abilities Program, K-6*

This course was being phased in as a preparation programme, replacing the more traditional preparatory programme for pre-service elementary and early childhood teachers. Previously, a single required course had trained students in skills needed for accommodating the gifted and talented as well as other learners who deviated from the "norm". According to Olenchak ( 1994 ), *While that may have been adequate in the past, we have consistently found that teachers must be adroit in a variety of strategies appropriate for working with a wide range of student abilities, interests and needs. As a result, our emphasis is switching from the one course approach to a much more comprehensive means for providing preservice teachers with a continuum of skills and knowledge bases.*

MAP focused on preparing teachers to accommodate the needs of a wide diversity of learners, including those of average ability, those with mild and moderate disabilities and those who are gifted and talented. It was envisaged that once the programme was fully phased in, about seventy five per cent of elementary and early childhood students would take the course.

In the elementary K-6 programme, a cohort of thirty six students took all their MAP courses together for five sequential semesters, following the completion of the University of Alabama Core Curriculum that encompassed a minimum of four semesters.

## CONTENT

The aspects covered were Professionalism, The Learner, Communication and Collaboration, Facilitation of Learning and Apprenticeship and Internship.

*Professionalism* included topics such as professional ethics, legal issues, contemporary issues in education, programmes and services within and outside of the school, and personal attitudes, philosophy, self growth and record keeping. *The Learner* looked at human development, multicultural diversity and exceptionalities, family influences and evaluation of learner characteristics and factors affecting the learner. *Communication and Collaboration* included developing educational plans and interacting with parents and professionals. *Facilitating Learning* addressed instructional design and delivery, including the curriculum areas.

The fifth dimension of the course was *Apprenticeship and Internship*. Mentor teachers supervised students across three semesters in long-term apprenticeships. Field experiences in general and special education settings were extensive in this course, comprising a greater proportion of the course than time on campus. There was close supervision from university faculty as well as mentor teachers who had been trained for this role.

Consideration of gifted and talented learners comprised a portion of the MAP training. The amount of emphasis and time was approximately equivalent across exceptionalities.

## ASSESSMENT

MAP allowed students to graduate with a B.A. and Alabama initial certification in Multiple Abilities K-6. The following means of evaluating student progress were used - performance measures using continuous feedback on progress from mentoring professors and teachers, portfolio documentation, simulations and case studies. Many team tasks and assignments were collaborative.

## ***B. Compulsory Pre-service Courses on CWSA***

### **CATERING FOR HIGH ABILITY ( GIFTED AND TALENTED ) STUDENTS Edith Cowan University**

#### **SOURCES:**

Newhouse-Maiden, L - Personal Correspondence 1994

Newhouse-Maiden , L & Williams, J (1994 ) - *Teacher Excellence: Student Excellence - A Pre-Service Model*

This six week module was compulsory for third year secondary teacher education students in the final semester of the BA(Ed). Although secondary pre-service education was not the focus of this thesis, discussion of this module has been included because its content and approach is also relevant to primary level training. Newhouse-Maiden (1994) believed it could be adapted with ease to the primary model.

This module had been offered and modified since 1984. Three other modules ran simultaneously with this one. It was taught to each of four groups of students in turn, after their final ten week teaching practice. They received one lecture on gifted education prior to the practice. During the delivery of the course in 1992, discussed here, modifications were made before teaching it to the last two cohorts of students.

The module aimed to provide student teachers with appropriate knowledge and strategies to meet the needs of gifted students in the regular classroom, and through personal reflection and active participation in a teaching-learning process that fosters creative thinking and problem solving, encouraged them to develop their own creativity and positive self images as teachers. Thus, both the content and the way in which the module was delivered, were important contributors to the student teacher's ability to cater for gifted students in the classroom.

The work of Maker, Renzulli and Adams & Wallace were drawn upon in the module. Maker ( 1982 ) believes curriculum differentiation for gifted students involves modifying the content, the process of learning, the end products and the learning environment. Renzulli's ( 1977 ) Enrichment Triad Model is

comprised of three types of activities - Type I General Exploratory activities which expose students to a wide range of topics and experiences, Type II Group Training activities which are concerned with the development of skills and thinking and feeling processes and Type III Individual and Small Group Investigations whereby a topic is studied in depth and a product results. Adams & Wallace ( 1990 ) advocate an interactive problem solving learning environment incorporating a metacognitive approach, in which pupils develop an image of self as a progressively efficient learner and problem solver.

Newhouse-Maiden had been involved in the early 1980s as a consultant with a high school science extension project ( Newhouse-Maiden & Washbourne, 1991) which incorporated some of these ideas. Practical scientific skills and metacognitive skills were developed and students increasingly became more independent of their mentor teachers and acted autonomously as real scientists. This experience was drawn upon in the development of the teacher education module.

## CONTENT

Session 1 focused on both content and process, thus incorporating Type I and Type II activities, and included guiding students through discovery in an activity related to the analysis of desirable characteristics of gifted teachers. They reflected individually on teachers who fostered creativity; in small groups analysed a research study on characteristics of gifted teachers and watched a video in which gifted students discussed effective teachers. This was followed by a plenary session on the desirable characteristics of teachers of the gifted.

Session 2, relating to producing definitions of enrichment, incorporated Type I General Exploratory enrichment, using Type II small group process skills and resulting in a Type III real product, a booklet of enrichment definitions. The students were set the task of producing a group definition of enrichment. They then documented their thinking/problem solving process, thereby fostering metacognitive skills. Each group presented their definitions on overhead transparencies and they were put together as a booklet.

The Session 3 workshop aimed to provide students with an academic basis for adopting strategies for the gifted by having them pre-read a core article and then summarise the major points.

In Session 4, lecturers initially summarised other articles related to curriculum modification, but when taught to the last two cohorts a syndicates approach was used. Each member of a group had to present a summary of an article to the group. The lecturer then drew together the major conclusions of each small group in a plenary session.

Session 5 also used the syndicates method in the modified version, instead of the one - way process of lecturing used initially. Each member of the small group prepared a short paper on an issue of their choice related to provision for the gifted in school, such as students with disabilities, underachievement, gender.

#### ASSESSMENT

Session 6 comprised a test of questions relating to planning curricular modification, characteristics of teachers of the gifted or curriculum compacting, and an issue of their choice.

The major assignment allowed a choice of four topics, although some students, working independently or in pairs, negotiated a contract with their lecturers.

An end of unit examination included a compulsory question on the ways of modifying and justifying a programme for the gifted in the regular classroom, with support from the literature. The students had been provided with this question in Session 3.

#### EVALUATION OF THE MODULE

In 1992 this module was evaluated over a three month period using a collaborative action research method. Eighty three per cent of students agreed or strongly agreed that the module had increased their interest in catering for highly able students. Data gathered showed that the students had positive attitudes towards catering for the gifted in the regular classroom and had also acquired the skills to create effective learning environments and to reflect on their effectiveness. When the module was taught to the last two

cohorts of students, modifications had been made to teaching methods used, and their responses were more positive than those of the first two groups.

The lecturers believed that the timing of the unit following teaching practice, was ideal. Students could apply the content knowledge and experience in their subject areas from teaching practice in making judgments with regard to enrichment, and could link their experience with theory presented in the module through reflection on practice. The pre - setting of the examination question promoted higher order thinking, positive attitudes and reflection. They concluded that this model of learning - teaching presented in the module had helped to *empower these student teachers as 'reflective creative practitioners', prior to embarking on a teaching career* ( Newhouse-Maiden & Williams, 1994:16 ). They also acknowledged that in the long term there was often the problem of maintaining effective change in their role as practising teachers in a 'conservative education system'.

### **C. Optional Pre-service Courses on CWSA**

#### **THE EXCEPTIONALLY ABLE CHILD / THE HIGHLY ABLE CHILD Middlesex University ( previously Middlesex Polytechnic )**

##### **SOURCES:**

Jones, L - Personal Correspondence 1994

Jones, L *Training teachers for The Exceptionally Able Child* ( 1991 )

Course Outline: *The Highly Able Child 1993-1994*

The module on *The Exceptionally Able Child*, a fourth year B.Ed Honours option, was introduced in 1985. It had since been renamed *The Highly Able Child*. Jones ( 1991 ) reported that it had its origins in the Honours option *Children With Special Needs* which incorporated a six week unit on education for gifted children. This provoked interest amongst the students but the time limit and lecturing format did not allow for full exploration of the topic. The idea of a separate course was mooted, which envisaged a research approach and work with children. A case study could be developed so that theories were generated from practice.

The course objectives stated:

- 1. to enable a student to examine the term highly able and other terms such as gifted, exceptionally able, bright, talented so as to delineate the area it purports to cover;*
- 2. to examine social and cultural issues inherent in the use of contemporary terms;*
- 3. to gain insight into recognised characteristics and needs so that identification of and learning opportunities for exceptionally able children can be made from an informed base;*
- 4. to become familiar with current educational thinking and provision for exceptionally able children in the United Kingdom, Europe and in other countries;*
- 5. to establish appropriate links with schools and to obtain practical experience with the problems of identifying, testing, devising and implementing a programme for a pupil who has a recognised talent at infants, junior or secondary school level*
- 6. to analyse major curriculum initiatives as well as commercially - produced and teacher devised resources.*

( Course Outline 1993 - 1994 )

## CONTENT

A significant part of the course was devoted to students' own research in schools. They devised and implemented curriculum for one child or a group of children, and there was time to plan, experiment and modify. Examples of past topics explored by the children were : a nine-year old designed a machine to chop off the top of a boiled egg; an eleven-year old studied food types and digestion; two seven-year olds planned a programme on the Victorians using primary documents. More recently, students had worked with a group of three or four children, one of whom was the highly able child, so that that child was not isolated. The National Curriculum now dictated the theme subject areas. Ten school visits were built into the course structure, over five consecutive weeks, although students may have needed to visit more than that.

Students held a forum to disseminate their findings to advisers, headteachers, teachers and students. A bank of resources was being built up

of the approaches students had used. Jones ( 1991 ) believed there is an inherent problem with one-off programmes; teachers need to be able to continue the programme when the student has left. He suggested that perhaps teachers could be released to join the Honours course for a half day or one day a week as an in-service approach.

Each year, the cohort of students taking the course had been small, especially in comparison with the numbers taking the Special Needs module which was offered at the same time, and the numbers continued to be small in 1994. Jones ( 1991 ) believed students did not see this area as a priority, but coping with children's learning and behaviour problems was. *Arguably provision for exceptionally able children could be reinstated in the Special Needs option from whence it came. But Special Needs is a gargantuan umbrella encompassing the teaching of children with mild and moderate learning difficulties* (p77).

Some of the reasons given by students for choosing to take the course were: *To know how to identify, teach, cope with and handle the able child and his/her parents. How to ensure the child is not 'missing out' but not letting less able children lose out i.e. classroom management that caters for the able child.*

*Year 3 class had high ability kids. I was dead frightened, absolutely terrified.*

*I was concerned during a difficult teaching practice that I wasn't catering for the children at the top end of the class.*

*How to cater for the 'Gifted child' in a class of mixed ability pupils, whilst, catering for the less able AND the 'middle-stream' learners and how NOT to restrict the 'gifted child' by providing for the majority rather than the needs of the individual.*

( Jones, 1991:77-78 )

## ASSESSMENT

There was a three hour examination comprising three questions, one of which was related to the school - based unit.

The coursework component was assessed through the production of a creative teaching resource based on the enrichment programme which students developed for children. It was evaluated on its rationale; the learning opportunities it provided for the children; resources developed to complement the learning; extension possibilities; how the children's work was assessed, including links with the National curriculum; presentation of the resource; and the ability to self-evaluate the implementation of the resource.

Jones ( 1991 ) believed that the course was attracting a number of students who were exceptionally able themselves, judging by the high proportion of students who achieved either first class Honours or second class Honours, first division. *The dilemma seems to be how to incorporate such approaches into the mainstream B.Ed ( 1991:78 ).*

## **PROVIDING FOR TALENT**

### **Armidale College of Advanced Education**

#### **SOURCES :**

Bailey, S ( 1986 ) *Renzulli's 'Enrichment Triad Model' as an Approach to Teacher Education courses on Catering for Gifted/Talented Children*

The *Providing for Talent* course was a third year option.

Bailey ( 1986 ) said the widespread preference for within class enrichment in Australia provided a reason for the Triad model in teacher education courses. It was possible to deepen students' understanding of the model by having them experience it. *The Triad's sequencing of learning, its open-endedness, its emphasis upon learning through practical, real-life activities and its in-built stress upon learner responsibility and accountability, makes it a useful framework for the professional development of educators of the gifted/talented. It is a model that seems likely to encourage teacher educators to be creative in course design and reflective in their teaching, thereby modelling conduct that is recommended in the literature on catering for the gifted/talented (p237).*

## CONTENT

*Type I, general exploratory activities, are intended to broaden and deepen students' interests and their perceptions of what is possible (p233). Some of those introduced to students in this course were:*

- a) Creativity exercises for the students, who then carried out creativity exercises with children, and shared the outcomes of both.
- b) To generate discussion about Type III products, the lecturer showed the students a movie produced by children with whom he had worked.
- c) A short animated film made by students showed possibilities and associated difficulties.
- d) A team of talented Year 6 children came to College to debate against a team of students from the course.

*Type II, skill building activities, seem vital if practising or prospective teachers are to get beyond the 'good intentions' stage of professional development (p234). Some of these were :*

- a) Students wrote questions and designed activities involving Bloom's taxonomy.
- b) Students were trained to do research e.g. interview talented adults about their childhood, which involved the development of interviewing, recording and reporting skills, which could in turn be taught to children.
- c) The webbing technique of brainstorming was used as a preliminary to engaging in unit writing.
- d) Creative Problem Solving was taught in in-class exercises.

Type III activities allowed students to engage in "real" professional activity, with real problems to solve and real audiences, in the following ways:

- a) The students were linked with teachers and classes for the unit writing activity they were required to do. These units included extension activities and were later reprinted in booklet form, so that all course members had about fifty units to take with them at the end of the course.
- b) Students worked with an individual or a small group of children on a project such as creating computer games, writing a book or creating videos. This culminated in a sharing session for parents, teachers, children and the students, so they learned from each other's work.

- c) Planning and implementing after school or weekend enrichment activities for children.
- d) Students were group leaders at a talent development camp for senior primary school children.

#### ASSESSMENT

One requirement of the course was writing a unit for a mixed ability class, with extension built into the unit.

After the student tutors worked with individuals or groups, they wrote a report on the development of their projects. This included pupil details, programme details, a tutorial record, project evaluation and suggestions for future extension work.

#### WORKING WITH GIFTED CHILDREN

**Charles Sturt University, Bathurst**

#### SOURCES:

Mares, L - Personal Correspondence 1994

Information pamphlet : *Gifted Education For Early Childhood, Primary & Secondary Teachers*

A one semester course *Working with Gifted Children* was offered as an elective to undergraduates, and about one third of the students elected to take it. It consisted of four contact hours per week.

Mares ( 1994 ) reported that some personnel in the university were trying to get Gifted education into the core of undergraduate studies. Special education and Gifted education were totally independent at Charles Sturt, and Mares said they had found from experience that it worked better that way. When Gifted education was integrated with the core subject of Special education, the large area only had a total of eight contact hours, which was insufficient.

## CONTENT

Topics covered were Identification of Gifted children ( about three weeks ); Systemic provision for Gifted children including such issues as acceleration, early admission, enrichment ( about two weeks ); Work with Gifted children in mixed mainstream classrooms ( four weeks ); Noncognitive or socioemotional needs (about two weeks ); and seminar work by individuals or groups of students on relevant specialised topics such as using fiction to work with gifted children, policies in gifted education. At least one hour per week was given to workshops where students produced teaching aid materials for their later work with children. Some voluntary contact with gifted children was involved at weekends held on campus for gifted and talented children.

## OTHER COURSES

Most of the tuition in Gifted education at Charles Sturt, Bathurst, was for teacher graduates. Usually these courses were taken after the graduate had had some school teaching experience, but some students continued into the fourth year B.Ed directly. All graduate courses were provided externally.

The fourth year of study, leading to a B.Ed, offered a special interest strand in *Teaching Gifted Children*. Six subjects in gifted education were taken plus two from the general strand. The subjects currently available in Gifted education were:

- Recognising the Gifted Child
- Programming for Gifted Children
- Mainstreaming Gifted Children
- Computers and Gifted Children
- Contemporary Issues in Gifted Education
- Integrating Acceleration

Two M.Ed courses were also available, one by coursework only, the other by coursework and thesis. Entry to these was restricted to those with at least two years full time teaching experience or relevant professional experience.

## EDUCATING GIFTED AND TALENTED CHILDREN

Griffith University, Mt Gravatt Campus

### SOURCES:

Milne, H - Personal correspondence 1994

Course Outline : *Educating Gifted and Talented Children*

*Griffith University Handbook 1994*

This one semester course offered as an extended studies option in the B.Ed-Special Education programme was designed to extend knowledge and skills gained in foundation and other courses, into a new synthesis relevant to meeting the needs of potentially gifted and talented students. The course also allowed students to gain knowledge that should enable them to proceed to more advanced courses and programmes in the field.

### CONTENT

The central questions addressed in this subject were:

- a. *How can we identify gifted and talented students and how can we provide for their special needs?*
- b. *What is the nature of the contribution made by gifted and talented people to the community?*
- c. *What problems are faced by gifted and talented students, their parents and families, teachers and schools?*
- d. *What curriculum and programme approaches may be used to assist gifted and talented students reach their potential?*

In addressing the latter question, emphasis was placed on the Schoolwide Enrichment Model ( Renzulli & Reis, 1985 ), which incorporates the Enrichment Triad Model.

The course included the development, implementation and evaluation by the student of an enrichment programme for a gifted or talented child.

### ASSESSMENT

Assessment was made of three aspects of the course:

Fifty per cent of the mark was for a two thousand word report relating to the enrichment interaction with a gifted or talented student. The report included the rationale behind the selection of the child, the identification procedures used, the programme objectives, development of the programme and how it was implemented and evaluated.

Thirty per cent of the grade was assessed through a fifty minute group seminar presentation. There was a choice of topics, including:

- a. Girls and giftedness - issues, practices and directions
- b. The definition, identification and development of giftedness in Aboriginal and Torres Strait Island groups
- c. Metacognition, metacognitive strategies and the development of thinking and problem solving strategies in gifted and talented children
- d. Problems and services and counselling procedures for gifted children and their parents

The seminar was marked on content, background work, co-operation and presentation. There was opportunity for creativity in research and presentation.

The remainder of the assessment was for a reading log which showed evidence of the student having read the set reference and other references, and the production of a resource kit to utilise in teaching.

## OTHER COURSES

The University also provided an elective subject *Educating Gifted Children* for teachers who wished to upgrade their three year degree to a four year B.Ed-Advanced Professional Development, and a strand within the Master of Special Education was on gifted and talented learners. Both of these were available through distance education.

## **GIFTED AND TALENTED ELECTIVE**

**University of New South Wales**

### **SOURCES:**

Hoekman, K - Personal Correspondence 1994

Course Outline : *Gifted and Talented Elective*

This was a one semester course, consisting of two contact hours per week.

*The aim of the course was to assist teachers to identify contexts which facilitate or impede the full development of high intellectual potential in children. The subject will critically examine the theories of giftedness and talent which currently influence Australian schools and education systems. Current research on the cognitive and affective development of gifted and talented children will be examined for its applicability to the development of programs and curricula for gifted students both in the regular classroom and in special settings such as withdrawal programs, opportunity classes, interest clubs and mentor programs.*

( Course Outline )

### **CONTENT**

The topics covered included:

- a. Types and levels of giftedness
- b. Definitions & models e.g. Marland, Renzulli, Terman, Tannenbaum, Gagne
- c. Underachievement
- d. Objective & subjective measures of identification
- e. Social & emotional development
- f. Curriculum differentiation
- g. Organisational structures in schools
- h. Accelerated progression

### **ASSESSMENT**

An essay, worth fifty per cent of the total mark, was chosen from three topics, one of which was a case study of a gifted child.

For the assignment, students were required to submit three lesson plans for a gifted student in any one of the key learning areas, with a description of the cognitive and affective traits of the individual.

The course had also been run with an essay and an examination as the two forms of assessment.

## **CATERING FOR ABOVE - AVERAGE PUPILS**

### **Name of Institution Not Specified**

#### **SOURCE:**

Braggett, E ( 1990 ) *University / College Education of Future Teachers of the Gifted : A Case Study*

A two semester elective course, *Catering for Above-Average Pupils* , involving thirty final year students in an Australian teacher education institution, attempted to introduce flexibility in the mode of teaching and provide relevance to the regular classroom situation where teachers are expected to cater for a range of intellectual abilities and interests.

#### **CONTENT**

An early session asked students to form small groups to work on a project that demanded advanced thinking skills, and to choose the two best thinkers. This led to discussion about elitism, attitudes, different types of giftedness, and equity. The students ultimately decided that schools should seek to develop the gifts and talents of all children and stretch the most able to their potential. The course lecturer saw it as encouraging that they arrived at this stance themselves rather than as a result of reading it or hearing it from a lecturer.

Following weeks were devoted to the identification stage, with students attempting to find means of identifying gifts and talents in each other. These included IQ and performance tests and checklists.

The programme planning and implementation section of the course was divided into three segments. The first reviewed the literature on classroom programmes and included the work of Maker ( 1982 ), Renzulli & Smith ( 1978 ) and Gallagher ( 1985 ).

In the second segment, all students considered their own abilities and developed them over the fifteen week period. These included learning a musical instrument, sketching and furniture restoration. The students were asked to engage in a metacognitive process and explore their own thoughts, judgments and feelings while doing their learning. All of them believed that this exercise gave them insights into the development of classroom programmes which aimed to develop the gifts and talents of all children.

The third segment involved the development of a unit of work which was later implemented in a regular classroom setting during a teaching practice period. The use of the Enrichment Triad Model ( Renzulli & Smith, 1978 ) was decided upon by common consent. The students arranged general exploratory activities for a group of mixed ability children, provided training in a limited number of activities and helped them find ways to present the results in a creative way. Some in the group questioned whether this went far enough for the very gifted students, and this led to a exploration of which types of abilities were not being addressed in this type of enrichment.

During the last third of the course, the students began to consider educational and administrative strategies of providing for very gifted students. Surrounding schools mostly could not assist as they did not have policies relating to gifted children. Four exercises were developed - exploring the work of children in nearby schools, from the perspective of Bloom's taxonomy; talking to school librarians to develop a checklist of skills which might help children work independently; working with a partner on a contract consisting of a small self-selected topic for investigation; and working in a school, where possible, for a week, with a small group of advanced pupils.

## ASSESSMENT

For their final evaluation, students were required to prepare a unit of work which included interdisciplinary material. The work was to be designed in such a way that most children would require three weeks to master the concepts and knowledge involved, while the more able children would move onto enrichment and extension work. They also had to provide a rationale for the approach adopted.

## ***D. Practicum Courses***

### **SUPER SATURDAY PROGRAM**

#### **Purdue University**

#### **SOURCES :**

Feldhusen, J - Personal Correspondence 1994

Feldhusen, J & Hansen, J ( 1988 ) *Teachers of the gifted : preparation and supervision*

Program Guide : *Purdue University's Gifted Education Resource Institute 1994 Summer Residential Programs*

Purdue University's Super Saturday Program offered thirty to forty 9 week courses each semester with as many as five hundred preschool through grade twelve students participating. The purpose of the programme was to provide a variety of challenging enrichment experiences for students in the top ten to twelve per cent in ability or talent. As well as Saturday sessions, in the summer, classes were held daily over a two week period.

It was mainly teachers who ran these classes for children, but practicum work was also available to undergraduates who taught classes or served as assistants in the Saturday Program.

#### **CONTENT**

Classes in such subjects as foreign languages, drama, statistics, chemistry and creative writing, were offered. In the summer residential programs, at the grades four to six level, workshops such as the following were available : Critical thinking, Spatial math, Problem solving in the scientific laboratory, and Chemistry. Other workshops were available to those in grades seven to twelve.

#### **ASSESSMENT**

Teachers were observed, evaluated and provided with feedback during the program, on such aspects as higher level thinking skills used, the chance for self-determination of work by students and pace of work scheduling.

Requirements for undergraduates were similar to, but less stringent than for in-service teachers. They were observed several times while teaching and

were required to keep a curriculum log and write a final evaluation report on the experience. They could earn one, two or three academic credits.

## **SUMMER ENRICHMENT PROGRAM & PRACTICUM FOR TEACHERS**

### **University of South Carolina**

#### **SOURCE :**

Mulhern, J & Ward, M ( 1983 ) *A Collaborative Program for Developing Teachers of Gifted and Talented Students*

The College of Education at South Carolina University entered into a partnership with a county school district, together developing a special course designed to train classroom teachers in strategies appropriate for working with gifted students in the regular classroom.

#### **CONTENT**

In the summer of 1980, four one-week institutes for gifted grade four to seven students were provided as learning laboratories for teacher training. Master teachers conducted the morning sessions while the trainees observed. Trainees then assumed limited instructional responsibility on a one to one basis with a gifted student. *Unlike the traditional graduate class, the emphasis in this course was on the practical application of educational theory to real children in an actual classroom setting* ( Mulhern & Ward, 1983:152 ). The classes in subsequent years were offered to children in kindergarten through to grade twelve and ran over five weeks with such topics as drama, mathematics, physical science, world affairs and creative arts.

#### **ASSESSMENT**

Each candidate for the practicum had to present evidence of possession of certain personal characteristics and demonstrate mastery of certain professional characteristics, either prior to or during the practicum. Personal characteristics included intellectual curiosity, leadership ability and interpersonal skills and professional characteristics included in-depth knowledge of a subject area and familiarity with several others and the ability to organize information into units for teaching gifted students. Other professional characteristics, such as diagnostic skills to determine student needs, were required for those wishing to become co-ordinators of the gifted.

**SCHOOL ATTACHMENT - GIFTED AND TALENTED**  
**University of New South Wales**

**SOURCES :**

Hoekman, K - Personal Correspondence 1994

*Course Outline : School Attachment - Gifted and Talented*

This was a fourteen week practicum elective.

**CONTENT**

A series of lectures on the characteristics of gifted children and teaching strategies which facilitate the full development of high intellectual potential were given, followed by the opportunity to observe and work in a mentor - type relationship with a primary school child with very high ability. The student designed a series of eight one-hour lessons for the child. In two follow-up sessions, the practical experiences were analysed and current theories of gifted education evaluated in the light of the personal experience.

**ASSESSMENT**

Assessment was through formative evaluation of lesson plans and two essay assignments. In the first assignment, the students were expected to complete a description in journal form of the nature of their mentor-type relationship with a child, the content of their first four individual lessons, and impressions gained during the observation sessions. The other assignment required students to draw on research material, consider the characteristics of the child they had been working with and compare their practical experience with the current theories of giftedness.

***E. Graduate Courses with a Special Emphasis***

**AMERICAN INDIAN TEACHER TRAINING PROGRAM ( AITTP )**  
**Oklahoma City University**

**SOURCE :**

Tonemah, S ( 1990 ) *American Indian Teacher Training Program*

This program was administered by the American Indian Research and Development Inc. ( AIRD ), through Oklahoma City University. AITTP was a first of its kind Masters degree program emphasising gifted and talented education and targeting Native Americans. AIRD believes that the success and effectiveness of gifted and talented programming is in direct proportion to the effectiveness of the teacher, and that competent Indian educators are best qualified to teach gifted Indian students, having greater insights into concerns, issues, problems and the nature of Indian students than do non-Indians. Qualities perceived as being the most favourable for these Indian educators include a commitment to Indian education, a commitment to gifted and talented education, creativity, valuing of intelligence, confidence in their teaching ability and in themselves, and sensitivity.

Ten participants, who were educators, teachers or counsellors, were given the opportunity annually to enhance their professional credentials in order to assist them in serving gifted and talented Indian students.

## CONTENT

There was a combination of traditional graduate level coursework in gifted and talented education and specially designed courses that provided participants with the opportunity to learn theory, concepts and teaching strategies that related directly to Indian gifted and talented education.

Topics included :

- a. Introduction to American Indian Assessment Model
- b. Assessing Creativity, Leadership, Tribal Cultural Understanding, Athletic abilities, Visual and Performing Arts
- c. Alternative Programs
- d. Developing a Philosophy for your Gifted and talented program
- e. Designing your Gifted and talented program

## ASSESSMENT

The criteria for the course grade were :

Class attendance and participation in discussion

Term paper on topics relating to American Indian gifted and talented education

Carrying out the required reading

The program led to an M.Ed with emphasis in gifted and talented education. Oklahoma City University gifted education programs are endorsed for certification by the state of Oklahoma and recognised nationally.

## ***Summary***

This chapter began with a summary of the questionnaire responses, followed by responses to the core interview questions. Profiles of provisions at three Colleges were then outlined by combining the questionnaire data, answers to core and specific interview questions and information from course outlines.

Twelve examples of overseas courses were described. Seven of these were from Australia, as they had much relevance to New Zealand programmes. Four from the U.S.A. were included due to new insights which they could provide. Few pre-service courses exist in the U.K., but one such course was outlined. As much detail as possible was provided on the contexts of courses, the way in which they were delivered and their content, so that important points in relation to these could be discussed in Chapter 5.

While Chapter 4 summarised results, Chapter 5 discusses and analyses each of the phases of research, separately and in combination.

## ***Chapter 5 : Discussion***

This chapter begins with a discussion of New Zealand provisions. The questionnaire and interview results are analysed and related to points made in the literature review. They are also compared to results of previous New Zealand studies. The content, modes of presentation and common patterns of overseas provisions are then discussed, and related to the literature. Finally, collated results are analysed to show similarities between New Zealand and overseas provisions, new insights which overseas courses provide, and how the results relate to issues raised in the literature.

### ***New Zealand Provisions***

Two methods of data gathering, questionnaires and interviews, were used to determine what the present provisions were in New Zealand for prospective primary school teachers to learn about the teaching of children with special abilities.

Questionnaires were sent to all of the six main providers, and the return rate was one hundred per cent. The results therefore yielded an overview of current provisions in New Zealand. However, within a College or School of Education, there are potentially so many personnel who may have input to students on the topic of children with special abilities, it seemed unlikely that a total picture of provisions was to be gained from the returned questionnaires. In order to supplement this information, half of the Colleges/Schools were approached for follow-up interviews. By combining questionnaire and interview information, provisions at the three institutions were then outlined. These profiles do not purport to describe *all* of the provisions in any one College/School - they summarise the information given by those who were asked to, nominated to, in a position to, or motivated to, answer questions about children with special abilities.

In order to retain confidentiality, the word *College* will be used generically in the discussion of results. The term *CWSA courses* includes courses on gifted education.

## ***Discussion of Questionnaire Results***

The questionnaire results showed that recommendations that compulsory courses on CWSA should be introduced and each College should provide a course on CWSA ( Pow, 1985; Freeman, 1991; NZAGC, 1993 ) have obviously not been implemented. Present provisions are similar to those reported from a previous survey ( McAlpine, 1992 ). However, the findings of that survey reflected new developments, as one of the CWSA courses began in 1991 and another in 1992. In Pow's ( 1985 ) survey, only one College had an optional CWSA course, of seven hours duration and one university offered a 200 level course on CWSA. In 1994, three Colleges of Education had optional courses on the education of children with special abilities for 3rd and 4th year students, and students at another College had the opportunity to take a paper at university in their 4th year.

The topic of special abilities was also considered in other courses. Within professional studies, coverage varied from the consideration of special abilities when discussing individual differences, to 50 hours within a 3rd year course. In curriculum courses, children with special abilities were considered in a general sense, with a small number of hours being specifically devoted to the topic in the 3rd year. Twelve hours out of a 50 hour course was the maximum amount of time mentioned. One College offered subject studies which allowed for personal development; in three subject areas, 4 hours out of 50 in the 3rd year were specified as devoted to children with special abilities. Only one questionnaire stated that there was a consideration of children with special abilities in Maori or multicultural studies, with the number of hours unknown. However, a respondent at another College indicated that the topic of teaching Maori children with special abilities could be considered for future courses. One CWSA course included cultural views of special abilities in the course content. Only one College specified the amount of time spent on children with special abilities within a special education course. This course considered children with special abilities for approximately twelve per cent of the time. Practical teaching involving children with special abilities was a component of two CWSA courses, but was mentioned very little in relation to other courses. Within some special needs and professional studies courses, students had opportunities to elect

to study children with special abilities, but the nature of this study was not specified in the questionnaire responses.

Overall, the questionnaire responses in regard to how students are introduced to teaching children with special abilities, reflected a similar range of contexts and philosophies to that discussed in the literature ( Joint Review of Teacher Education, 1986; Senate Select Committee, 1988; Seeley, 1989; Jones, 1991; George, 1992b ). Children with special abilities were considered within the context of catering for individual differences in general education courses, as a specific topic in special education or general education courses, and in separate courses. In general, more time was devoted to considering children with special abilities in the final year of training. All students in one College spent a significant period of time ( 50 hours ) studying this topic in 3rd year Professional and Education Studies. In other Colleges, only a small amount of time for all students was devoted to considering children with special abilities, but in three of them, students could elect to take a course on CWSA.

Details of the content of two of the CWSA courses were provided. The common elements considered were : characteristics of children with special abilities, identification methods, curriculum approaches, and planning work and carrying it out with a child in a school. Both courses focused on Renzulli's Enrichment Triad Model.

The questionnaires provided a useful and up-to-date overview of New Zealand provisions, but also indicated the need for further information. As the amount of information supplied varied with individual Colleges, there were limitations on the comprehensiveness of the overview. In some cases, one person - a Director of Primary Education or co-ordinator of a CWSA course, filled in the questionnaire on behalf of the College, thus providing useful information, but not necessarily sufficient detail for the purpose of this study. Data gathered from interviews clarified some of the references made to provisions in questionnaire responses. Further information was supplied on such aspects as the type and amount of input on children with special abilities in special education courses, the nature of students' elected study on children with special abilities, and the extent to which practical work with children with special abilities was available to students.

## ***Discussion of Interview Results***

It was beyond the scope of this study to carry out interviews at all six Colleges, which are geographically spread throughout New Zealand. A sample of half of them was selected, using the criteria outlined in the methodology section, and eight interviews were conducted.

Of the eight people interviewed, four were directly involved in teaching about CWSA - two senior lecturers in education who taught CWSA courses at two different Colleges, and a senior lecturer and a Head of Special Education from the same College who taught about children with special abilities within the context of catering for special needs.

All respondents believed that an understanding of children with special abilities and how to provide for them, should be included in a pre-service programme, and that this should occur throughout the course. The four lecturers directly involved with teaching about children with special abilities, all expressed strong feelings that this topic should be included, saying *I think it's essential; no question about it; I have no doubts about that whatever ;and definitely*, and all four believed that it should be introduced in a general way early on, and in a more specific sense as the course progressed. Those less directly involved in this teaching ( a Head of Special Education, a Head of Professional Studies, and two Directors of Primary Education ) wished to see it infused into courses throughout the programme, with one saying it should be highlighted occasionally.

The fact that students will go out as beginning teachers to teach in mixed ability classrooms where they will need to be able to cater for a range of abilities and individual differences, was the main reason given for the importance of this understanding and knowledge to be included in College courses. This is also supported in the literature ( Sherwood, 1983; McAlpine, 1992; Reid, 1993 ).

In discussing a College, personal or departmental philosophy, most respondents outlined a general philosophy which involved all learners and reflected the need for students to have experience of a range of abilities and to be able to cater for children's individual needs. Three commented more

specifically on children with special abilities. One respondent felt unsure about what the approaches of other departments were but felt the College supported the course philosophy on children with special abilities. Another respondent said there was no unified approach and that some colleagues had a limited understanding of giftedness. The other person said their particular department had made a conscious decision not to include children with special abilities, and there was no unified approach in the College.

There was no unanimous agreement within any one College about whether there was a general College philosophy on children with special abilities. However, there was no real conflict of philosophical ideas expressed between personnel, but rather, some lack of knowledge about what others were doing within the College. One person did, however, see it as a controversial area and another said some colleagues believe that gifted children do not exist, and those perceived as gifted are just quantitatively different from others.

One respondent raised the question of whether giving specialist skills of catering for different levels of ability was appropriate at the pre-service level, for student teachers may not be ready for that. Another respondent believed basic skills and awareness of strengths and needs only should be given in initial teacher education with professional development when teaching building on to that. Some respondents did mention the possibility of in-service input through Colleges and supported the idea of a continuum of professional development beginning at pre-service level. There is support in the literature for initial skills to be given at the pre-service level with in-service work building on this ( Sherwood, 1983; Rogers, 1989; George, 1992b ). However, there are varying opinions as to how much training should be given initially, with some seeing giftedness introduced in the context of awareness of individual differences ( Joint Review of Teacher Education, 1986; George, 1992b ), others believing student teachers need to have knowledge also of identification techniques and teaching strategies ( Lindsey, 1980; Sherwood, 1983; Senate Select Committee, 1988; Rogers, 1989; Bailey & Sinclair, 1990 ) and others who expect more comprehensive training ( Seeley, 1989; Freeman, 1991; Williams, 1991; Clark, 1992; NZAGC, 1993 ).

Tomlinson et al ( 1994 ) confirm that research shows pre-service teachers typically focus on "survival" concerns like class control and personal

adequacy, and concerns about individual needs of students tend to come later, with much more experience. However, they also say that if it is accepted that student teachers are not ready for catering for differing levels of ability and this aspect is not included in a pre-service programme, students will continue to see it as a low priority and they will perpetuate what they see happening in schools. Several respondents at the interviews said that often there was not much happening in schools for children with special abilities, and students from courses which focused on children with special abilities helped raise awareness and interest when working in schools. As a result of this, some teachers either attended courses on children with special abilities themselves, or expressed the desire to do so if a course was available.

As well as the philosophical question of whether input on children with special abilities should be included at the pre-service level, there also needs to be a consideration of the restrictions on doing so. Insight was provided by interviewees on reasons which, coupled with philosophical considerations, may explain why provisions on children with special abilities are still limited. Many of these revolved around the crowded nature of the primary pre-service programme with increased curriculum demands and pressures to include new content. This seems to parallel what has happened in the U.K. where Jones ( 1991 ) and George ( 1992a ) report that curriculum time has increased in teacher education since the Education Reform Act of 1988 introduced a new National Curriculum consisting of ten subjects. It was also felt by some of those interviewed that while some schools want students to emerge with skills in relation to children with special abilities, others do not see it as a priority area due to new curriculum demands and a lack of mandate from the Ministry of Education. However, pressure from schools to have this area highlighted in Colleges may be expected to increase for several reasons. The literature reports a growth in provisions in schools for children with special abilities ( McAlpine, 1992; Moltzen, 1993 ) and there has been a growing demand from parents for this to happen ( Moltzen, 1992 ). Some respondents mentioned statements in recent documents as being a reason for needing to consider children with special abilities, and reforms in education are giving a qualification in CWSA *market place value*. All three Colleges also reported increased interest from students in CWSA or special education courses. One College had one hundred and ten students in the optional gifted education course, and numbers were capped at that level due to lecturer overload.

Another CWSA course which limited the numbers to twenty five per semester, was to put the course on twice in the one semester in the following year. In the other College, numbers attracted to the special education selected study had continued to grow, with one third of students electing to take it. Some respondents stated that the increase in students electing to take the courses and the positive attitude of students who did so, swayed them slightly in favour of optional rather than compulsory courses.

Course information offered at the interview by the co-ordinator of *Education of Gifted Children* provided information not available in the questionnaire. This course, along with the other two CWSA courses, also considered characteristics and identification and approaches to curriculum, but not the planning of a unit of work or working with a child in a school. Other topics like intelligence, parenting and underachievement were covered in this course.

Specific assignments in regard to children with special abilities were not a major feature of teaching practice in any of the Colleges. Where students did have the opportunity in special education, professional studies or CWSA courses to do practical work, the focus was on working with individual children.

Overall, the interviews allowed the researcher to clarify some of the questionnaire data, seek further specific information about courses and seek opinions from people holding various positions within Colleges. In some instances, more precise information or figures were provided through responses to specific interview questions, than were originally provided in questionnaire responses. The interviews enabled philosophical perspectives to be reported and profiles of provisions at three of the Colleges to be drawn by combining interview data with questionnaire data.

It is acknowledged that the conducting of interviews at only three of the six Colleges limited the collection of the full range of possible data.

## ***Discussion of Combined Results from Interviews and Questionnaires***

Questionnaire and interview results have previously been discussed separately. This section firstly considers provisions in the three Colleges which were surveyed by both interview and questionnaire. Then, in tabular form, a comparison is made between courses specifically on children with special abilities. This information was gathered by questionnaire in the case of College F and by questionnaire and interviews for Colleges A and B.

### **Provisions at Colleges A, B and C**

College A offered a separate course on CWSA to 300 level students. The Special Education Department normally did not consider children with special abilities in its courses, although had provided some lectures from an outside speaker in the last two years. College B offered a separate CWSA course to 300 level students, and a Special Education course which considered CWSA was compulsory for all 200 level students. College C did not offer a CWSA course, but students could elect to take a 300 level paper at university in the fourth year. A Special Education course, taken by students as a second year Selected Study, did consider CWSA to a limited degree. Thus, students at all three Colleges had the opportunity within a separate course or a special education course to gain an understanding of children with special abilities. Only one College had a compulsory component on children with special abilities for all students.

In all three Colleges it was mentioned that children with special abilities were considered in other courses, particularly in curriculum and professional studies courses. However, the hours devoted to children with special abilities were few in number or could not be specified. The amount of input and the way in which the topic was considered, seemed to be generally left to the discretion of individual lecturers.

In these Colleges where separate courses or university papers were offered, there was only a small amount of input on children with special abilities

throughout the rest of the College programme. Possibly the general belief was that optional courses provided sufficient coverage of the topic, for those who were interested.

### CWSA Courses at Colleges A, B and F

TABLE 4 : A COMPARISON OF CWSA COURSES

College:	A	B	F
<b>Title :</b>	<i>Catering for CWSA Within the Classroom</i>	<i>Education of Gifted Children</i>	<i>Children With Special Abilities</i>
<b>First offered :</b>	1992	1991	1988
<b>Length :</b>	50 hour, 1 semester	48 hour, 1 semester	24 hours plus practicum
<b>Optional or compulsory :</b>	Optional	Optional	Optional
<b>To whom offered:</b>	300 level students	300 level students	300 level students
<b>Number of students :</b>	40 in 1994	110 in 1994	23 in 1994
<b>College roll no :</b>	1140	770	631

**TABLE 4  
(CONTINUED)**

	<b>A</b>	<b>B</b>	<b>F</b>
<b>Focus / Rationale:</b>	Developing a responsive environment to cater for CWSA in the classroom	Theoretical considerations in gifted education	Catering for CWSA, who have special needs, in mainstreamed settings
<b>Content :</b>	Terminology Characteristics Identification Responsive learning environment Enrichment & acceleration Curriculum models Levels of Thinking Cultural concepts Personal philosophy & action plan	Definitions Characteristics Identification History of Gifted education Intelligence Enrichment & acceleration Curriculum models Learning styles & development of thinking skills Class, culture, gender & disability Creativity Under - achievement Parenting	Giftedness Characteristics Identification Past & present provisions Developing a curriculum Curriculum planning Teaching higher order thinking Resource & support networks, including parents Issues relating to education of CWSA Pupil profiles
<b>Teaching Experience :</b>	Observation Work with individual children	Generally none. Research project as option	Work with individual children

These three courses had similarities such as their optional nature, their placement at the end of training programmes and their content. Common elements of content included a consideration of characteristics of children with special abilities, identification, curriculum models and curriculum planning and enrichment strategies. One of the courses was of a theoretical nature, with the other two combining theory with practice, and focusing on the classroom.

Special features of course A were the analysis of course content in relation to students' prior learning in the introductory session; the introduction of students to metacognition in reflecting on their practical work; consideration of new curriculum documents in relation to enrichment and acceleration; the invitation of speakers on concepts of special abilities in different cultures; and students' development of a personal philosophy and action plan. Background theory of the CWSA course was also shared by the co-ordinator with other professional practice tutors.

Course B was unusual in that teachers and other educators also took the course. The teachers could elect to undertake a practical research project. A practical element was generally not available to student teachers. Course content included the topics of intelligence, creativity and underachievement. This course attracted a large number of students - up to fifty per cent of those eligible, elected to take the course.

Course F was the longest running course, having been offered for eight years. Prior to that, a shorter course on children with special abilities was available. A consideration of support and resource networks was a special feature of this course.

As well as the CWSA courses which these Colleges offered, College B had a component on children with special abilities within a compulsory course in the second year. College F considered children with special abilities for approximately 20 out of 168 hours in an optional 300 level special education course. Fifteen per cent of students took this course in 1994. Children with special abilities were considered to some degree in all three Colleges in other curriculum and professional studies courses.

## ***Discussion of Overseas Provisions***

To gain a broader picture of possible provisions, published descriptions of overseas courses were sought, and references in the literature were followed up with personal correspondence to course directors in other countries.

Although the courses described are quite different from one another, some common patterns emerged.

In all cases where information on the placement of courses was available, courses in gifted education were found to be at the end of a training programme, either in the third or fourth year.

The majority of the courses were optional, of one semester's duration and focused entirely on gifted and talented learners. One course was only six weeks in length, but was compulsory for all secondary undergraduates. The *Multiple Abilities Program* was the most comprehensive, being five semesters in length, but focused on catering for a wide diversity of learners, adopting a broader approach than the special needs one which the university had taken in the past. Australia's Charles Sturt University, Bathurst, previously had an integrated special education course, but found that insufficient time could be devoted to gifted education in this context, and so opted for a separate course on *Working with Gifted Children*. In the U.K., Middlesex Polytechnic's *Children with Special Needs* course incorporated a unit on children with special abilities, but it was found that the time limit and format of the course did not allow for full exploration of the topic of exceptionally able children, so a special module was developed.

The main focus of content of the courses was on enrichment in the regular classroom, with common elements including the characteristics of gifted children and how to identify them, differentiation of the curriculum, enrichment strategies including creativity, problem solving and thinking skills, and programme planning. Several courses provided opportunities for students to choose issues, such as gender, culture, policy and underachievement on which to focus. Consideration of acceleration, school organisational structures, parenting issues and social-emotional needs were also included in some courses. The content areas are in keeping with Clark's ( 1992 ) seven

recommended basic competencies which teachers need to be effective with gifted learners, and on which a teacher education programme should be based.

Five of the courses included content based on Renzulli's Enrichment Triad Model ( 1977 ); in some cases it was a major focus of the course. The Triad is a model specifically designed to challenge gifted children, but aspects of it are suitable for all children. Types I and II activities introduce pupils to a variety of interesting topics and help them acquire skills and ways of thinking which will allow them to become more independent learners. Type III activities involve very able children in in-depth study of areas of interest, with an emphasis on a real "product". As teacher education courses prepare students to work in mixed ability classes, where enrichment occurs mostly within class, the Triad is a useful model to introduce to students ( Bailey,1986 ). Three of the courses allowed students to actually experience the Triad strategies in their own learning, thus acknowledging that the way in which student teachers learn may be as important as what they learn ( Lindsey,1980; Braggett,1990 ). Metacognitive reflection on what they were experiencing was also incorporated, being important in the development of personal and professional characteristics necessary for understanding and teaching gifted children ( Lindsey,1980; Rogers,1983; Newhouse-Maiden & Washbourne,1991 ).

Because the way in which student teachers learn is important, lectures may not always be the ideal mode of teaching and learning ( Braggett,1990; Jones,1991; Newhouse-Maiden & Williams,1994 ). Many other methods were used in the courses discussed, including group activities followed by a plenary; presentation of group seminars; presentation of a paper on an issue, or a summary of an article, by an individual to a group; working with a partner on an investigative contract; Creative Problem Solving; conducting interviews; development of an ability of one's own and reflection on this; and debating with gifted children. Newhouse-Maiden & Williams ( 1994 ) reported that in the *Catering for High Ability Students* course, evaluations were more positive from the last two cohorts of students who experienced the course after some changes from lecturing to syndicate type group work, were incorporated.

Field experiences *which are a valuable and necessary component of a comprehensive training program for prospective teachers of gifted and talented students* ( Feldhusen & Huffman, 1988 ), were also a major feature of several courses and included learning by observing master teachers working with children's enrichment classes; long term apprenticeships in a classroom with a mentor teacher; working in a mentorship or tutorial role with an individual child or small group of children in schools; and working with children in weekend, after school or holiday classes. In several cases the practicum featured both as part of the coursework and of the assessment procedures. Where practicum experiences were long term, as in *MAP*, the *Super Saturday Program* and the University of South Carolina classes, actual work with children was observed and assessed and feedback given, thus encouraging desirable professional and personal competencies to develop ( Lindsey, 1980; Maker, 1982; Mulhern & Ward, 1983; Cropley & McLeod, 1986; Clark, 1992; Scott, 1992 ). In other programmes, a report on the practical work carried out, or production of a resource based on it, was required.

Other forms of assessment included written assignments, development of a practical unit of work, group seminars, team tasks and tests. Examinations did not feature prominently; in one case, students were given an examination question in advance to prepare.

Several courses included opportunities for students to develop useful teaching resources. In some, units of work which students developed and taught in schools were collated into booklets, and in others, time was allowed for production of resource kits and teaching aid materials.

Two courses which were offered solely to teachers rather than to student teachers were included in this collation of examples. The training of teachers to cater for able pupils through practical experience, as in the University of South Carolina's enrichment classes, could also be a means of providing learning opportunities for students, and was included for this reason. Other courses discussed did include opportunities, often voluntary, for student teachers to work with children in enrichment classes.

The other course for experienced teachers and educators was a course provided specifically to enhance the education of gifted native American

Indian children through being taught by committed Indian teachers. This course was included as parallels may be able to be drawn with the education of teachers of Maori children. Bevan-Brown ( 1993 ) found that a major concern for Maori people was the need for adequately trained teachers who could recognise Maori children with special abilities, use appropriate teaching methods, and provide a supportive and culturally - valuing environment in which talents will surface.

## ***Discussion of Collated Results***

This section discusses the information gathered by the various methods used in this study and considers it in relation to the literature.

### **Rationale**

The rationale behind including the teaching of children with special abilities in a pre-service programme, as outlined by those who responded to the questionnaire or interview questions, centred on the need to have knowledge of the characteristics and needs of children with special abilities so that their abilities could be developed through programming appropriately for them in the regular classroom. This was seen by most either in the context of learning to focus on individual needs and cater for all levels of ability, or in the context of recognising and catering for special needs. One course outline states in its rationale that *Children with special abilities are a group with special learning needs who, historically, have been disadvantaged in the New Zealand education system*. A respondent to the questionnaire stated that there were gifted children in every class who often go unidentified. An interviewee said that people with special abilities were undervalued, and the school system on the whole did not do enough for them, so it was important in teacher education to encourage students to be aware of the characteristics of children with special abilities and then do something for them, when teaching. The need to engender positive attitudes through having knowledge and

understanding of children with special abilities is highlighted by research which suggests that if teachers do not have this understanding, they can feel threatened by gifted students or negative or indifferent towards them ( Marland,1972; Morris,1987; Seeley,1989; Clark,1992 ).

The rationale behind the development of the *Multiple Abilities Program* was similar to rationales stated by the New Zealand educators, that is, *teachers must be adroit in a variety of strategies appropriate for working with a wide range of student abilities, interests and needs* ( Olenchak,1994 ). The other pre-service courses discussed, also prepared student teachers to work in the context of mixed ability classes.

### **Contexts of Learning**

Learning about children with special abilities in the context of individual differences in general education, special education and curriculum courses, as a specific component within special education courses, and in separate courses, are all accepted practices in New Zealand Colleges of Education. Some support is shown in the literature for separate courses ( Seeley,1989; Freeman,1991 ) and two of the overseas courses discussed, had changed from being courses within special education to separate courses. Although Hultgren & Seeley's 1982 survey ( in Seeley, 1989 ) found short units within general education coursework to be the more common practice, this may be gradually changing. It is probable that the commitment and conviction of individuals who feel strongly about children with special abilities, results in courses on CWSA being established. Accent on individual differences alone may not be sufficient to help students cater for the needs of more able students. Tomlinson et al ( 1994 ) report that although pre-service teachers profess to acknowledge the existence of individual differences and the responsibility of the teacher to meet them, in practice they plan one lesson to suit the largest number of students, and may give some special attention to the lower achievers.

The amount of emphasis on children with special abilities in general education courses may depend on the interest and background of the lecturer. Several respondents confirmed this with comments about input on

children with special abilities being dependent on a lecturer's own experience or knowledge, that attitudes varied, and that it was impossible to know how much input there was in curriculum and education courses, but there was an assumption that it was happening.

Emphasis in some courses was also minimal due to the need to cover so many topics. In one special education course which included the topic of special abilities, a workshop seminar on gifted and talented children presented by students, was the only specific content on this area of exceptionality. The lecturer said : *Whatever students leave the seminar with is all they're going to have. Unless, obviously, they decide to follow it up themselves.*

### **The Development of Professional and Personal Characteristics**

What teachers actually need to know and be able to do in regard to teaching children with special abilities, can be seen as necessary competencies and also necessary learning outcomes of teacher education courses. Emphasis at College has to be placed on developing professional characteristics, as this is within a lecturer's scope of influence, but personal characteristics and attitudes may also be altered and developed if metacognitive approaches to training are taken ( Lindsey, 1980 ).

### **Content**

Statements made in the contexts of interviews or questionnaires, along with course outlines and examples of overseas courses suggest that student teachers, by the time they begin teaching, need to have knowledge of some or all of the following, in regard to children with special abilities :

Terminology, such as gifted and talented, children with special abilities, children with special needs, exceptionally able

Concepts of special abilities, including differing cultural concepts

Characteristics of children with special abilities

How to identify, in an ongoing way

How to cater for individual needs and learning styles

How to develop individual profiles, case studies and IEPs

How to provide a responsive environment

Enrichment strategies e.g. independent learning skills, higher level thinking, investigations, creative thinking, problem solving, metacognition  
 How to plan work for an individual child, within a class unit of work  
 Curriculum and enrichment models  
 How to differentiate the curriculum  
 Catering for special abilities in curriculum areas  
 Social-emotional needs  
 Schoolwide enrichment strategies and organisational structures in schools, including acceleration  
 How to interact with parents  
 Historical developments within gifted education  
 Contemporary issues such as those relating to gender, culture, disability, counselling, policy, underachievement

These areas of knowledge are in keeping with those recommended in the literature ( Maker, 1982; Cross & Dobbs, 1987; Clark, 1992 ) and incorporate the first two levels of training needs - those of a classroom teacher and a resource teacher of gifted children, identified by Rogers ( 1989 ).

The use of the Enrichment Triad Model and the incorporation of different levels of thinking of Bloom's taxonomy, appeared in the content of some of the New Zealand and overseas courses. The Triad was used as a way of working with children in the practical sessions in two New Zealand courses; some of the overseas courses went further and had students actually learning that way also. Bloom's taxonomy was used as a way of incorporating higher levels of thinking within enrichment work.

### **Practical Experience**

Students need practical experience in working with children with special abilities in schools and / or enrichment classes. The practicum, also called a teaching practice section or teaching experience, is an integral part of New Zealand teacher training ( Renwick & Vize, 1993 ). Studies in Australia also confirm school experience to be an extremely important component of pre-service education ( Tisher, 1990 ). Trainees say that it *helps reduce their anxiety about teaching* and *helps them develop realistic perspectives about*

*pupils* (p75). Although the practicum provides an opportunity to observe, and interact and work with children with special abilities, the practical teaching element in regard to these children was generally small in New Zealand Colleges. Often direct work with a child with special abilities occurred only if a student elected to do so. Two of the CWSA courses did, however, include work with individual children as an integral part. Courses overseas also tended to concentrate on work with individual children, although some students worked with small groups of children in classrooms or in enrichment classes out of school.

Sometimes, the timing of periods when New Zealand students were out on general teaching practice sections in schools did not coincide well with CWSA or special education courses in Colleges. In one case, the practicum came after the course, so students could only be given cues to look out for. In another instance, the teaching experience block came early in the course when students did not have sufficient content knowledge to look critically at what was happening. However, they could reflect on what they saw. In an overseas course, lecturers whose students went on teaching practice after only one lecture, saw this as positive, because after the practicum students could reflect on the practice, when theory was introduced. In a practicum elective course, theory and teaching strategies were introduced first, followed by students working with children, and then follow up sessions allowed for theory to be linked with personal experience.

Tisher (1990 ) comments that for some supervising teachers, the practicum may well be a form of in-service development. Some College personnel interviewed echoed this view. It may be that associate teachers also need education in the teaching of children with special abilities. In general ...*the role of the associate teacher is also one that requires training and regular updating* ( Renwick & Vize, 1993:100 ). Several interviewees commented on the in-service role which Colleges could play.

### **Metacognition**

Metacognition and higher order thinking skills were considered in some of the New Zealand courses, as well as the overseas ones. This is important as gifted children are more advanced than others in metacognitive development

( Rogers, 1983; Pui-wan Chang, 1993 ). Students were encouraged to be directly involved metacognitively in the final assignment of one CWSA course where a reflective statement about the process and what was produced when working with a child, from both the child's and the student teacher's points of view, was required. The need for children to be engaged metacognitively was also discussed in the course. *To demonstrate a range of teaching approaches which challenge children to engage in higher-order thinking* was a learning outcome of the course, *Children With Special Abilities*, and the development of thinking skills was listed as a topic in *The Education of Gifted Children*.

### **Multicultural Perspectives**

Maori or multicultural considerations of children with special abilities were mentioned in some instances in this study. In the questionnaire responses, only one College said that a component of Maori or multicultural courses considered children with special abilities - it may be that the personnel who filled in the questionnaires were unaware of the content of these courses . A lecturer from another College said that it would be worthwhile considering a course on teaching Maori children with special abilities in the future, or incorporating a CWSA component into a 300 level Maori Studies course. Respondents at one College mentioned at the interviews that new research on Maori conceptions of special abilities was being incorporated into their courses. One CWSA course included a component on differing cultural conceptions of special abilities, including a Maori perspective. Another course, *Education of Gifted Children* stated in its course prescription that *Important consideration will be given to bicultural, gender and family/whanau issues*. These components within courses are in keeping with, although do not go the full way towards, Bevan-Brown's ( 1993 ) recommendation that *Provision should be made for teacher training and in-service courses that focus on identifying and catering for Maori CWSA in a culturally appropriate way* (p159). This recommendation is similar to the aim of the *American Indian Teacher Training Program*. The other reported overseas programmes made only limited reference to multicultural diversity. One Australian programme included as a group seminar topic, *Definition, identification and development of giftedness in Aboriginal and Torres Straits Island groups*, and MAP content included multicultural diversity in relation to *The Learner*.

## ***Summary***

In summary, the different methods used in this study all contributed to addressing the research question of how an understanding of teaching children with special abilities can be introduced in pre-service programmes.

By surveying all six New Zealand Colleges/Schools of Education, the questionnaire provided an overview of present provisions which could then build on to the data gathered in previous studies. Interviews in three of the Colleges, gave respondents either their first opportunity to have input to the study, or the chance to elaborate upon questionnaire responses. College, departmental and personal beliefs, philosophies and rationales were expressed, and a clearer picture was gained of the factors which make increased provisions on learning about children with special abilities, difficult.

By combining questionnaire and interview data, it can be seen that different Colleges took different approaches to teaching students about children with special abilities. Some professional studies courses, for instance, had a large number of hours devoted to children with special abilities, while others mentioned children with special abilities only incidentally. In one College where there was a separate CWSA course, the special education department did not normally include children with special abilities in their courses. One College had both a CWSA course and a significant module in a special education course. Within the present context of a New Zealand College of Education, there is potentially the opportunity for all approaches to be incorporated - a separate course on CWSA, components within special education courses, and infusion into, or as a component of, professional studies, Maori and multicultural studies and curriculum courses. In the future, particular unit standards may be taught specifically within any one of these contexts.

Reporting on examples of overseas provisions allowed similarities between these and New Zealand provisions to be noted. The content, duration and optional nature were common elements of CWSA courses. They were also placed at the end of training programmes which may reflect the idea that later in the course is the time when students can capitalise upon the knowledge, skills and experience acquired earlier in the course ( George, 1992b ). Specific

components on CWSA within general education courses in New Zealand, were also normally placed in the third year. Overseas examples also provided new insights through descriptions of courses of a different nature, such as the practicum courses, *MAP* and *AITTP*, and of courses which encouraged student teachers to learn in the same ways which are effective for gifted learners.

Overall, provisions on children with special abilities in New Zealand Colleges/Schools of Education could still be said to be *optional and minimal* (McAlpine, 1992), with current provisions not having changed much since the 1992 survey. However, McAlpine also saw *encouraging signs* in what was being offered, and from the present survey it is encouraging to note the incorporation into New Zealand teacher education programmes of points suggested in the research literature. Proposals for more courses on CWSA to be offered at some Colleges reflects the call in the literature for an increased emphasis on children with special abilities in pre-service courses. The inclusion of Maori and multicultural perspectives within courses reflects the need to consider children with special abilities from diverse cultural backgrounds. The content of CWSA courses was similar to that advocated in the literature. As courses were generally limited in duration, however, not all aspects of content may be covered in each of the courses. The importance of metacognition may be gradually being recognised and incorporated into course content and approach. The practical element was available, at least as an option, in some general education, special education and CWSA courses.

It is also encouraging that Colleges have noted high interest from students in taking courses on CWSA. Interviewees reported that courses attracted those students who had a particular personal interest in giftedness or special needs, or an open-minded attitude, as well as a small element who saw "market value" in having such knowledge, or it fitted in with their timetable. Jones (1991) reported that the course, *The Exceptionally Able Child* seemed to attract a high proportion of very able students, and believed the dilemma was *how to incorporate such approaches into the mainstream B.Ed* (p78). How to engender an understanding of the needs of children with special abilities in students indifferent to, not attuned to, or with negative attitudes towards children with special abilities, is an important issue to be addressed

in teacher education. In regard to pre-service training, McAlpine ( 1992:29 ) says : *The critical importance of this period of education in terms of establishing sound knowledge, helpful experiences and positive attitudes toward the education of the gifted and talented and other children with special needs cannot be over-emphasised.* Research ( Morris, 1987; Clark, 1992 ) has shown that possession of knowledge of the needs of these children and how to cater for them, helps to foster positive attitudes. In Chapter 6, recommendations are made on how teacher education programmes can provide students with this kind of knowledge.

## ***Chapter 6 : Conclusion***

The purpose of this study was to find out the ways in which learning about catering for children with special abilities could be addressed in primary level pre-service education programmes. Because New Zealand schools are making increased provisions for children with special abilities, mainly within mixed ability classes, it is important for beginning teachers to know how to identify and provide appropriately for them. Previous studies had found provisions in Colleges of Education to be minimal. This study sought to find out whether the situation had changed. It also sought to build on to the two previous studies by ascertaining not only what provisions were presently offered at Colleges/Schools of Education, but also what the views of teacher educators were on issues related to the provisions. These included the relevance of considering children with special abilities in teacher education programmes, when such input should occur, what rationales guided provisions and what factors limited provisions. To provide further insight into how a consideration of children with special abilities could be incorporated into programmes, the study also reported on some provisions in Australia, U.K. and U.S.A. As many educators have been calling for an increased emphasis on children with special abilities in training programmes, it was important to make some recommendations of practical use to teacher educators on how this increased emphasis could be achieved.

Following a critical review of the literature and using information obtained in the present study, principles of sound practice in teacher education in regard to children with special abilities, have been formulated. The principles can be modified or expanded upon in the light of further research. Providers can choose to incorporate these principles into programmes in varying ways, within the present structure of teacher education and the new structure based on unit standards.

Some recommendations as to how these principles could be incorporated into programmes, have also been made.

## ***Principles :***

### **Importance of Including the Topic of CWSA in Teacher Education Programmes**

1. Because positive attitudes towards children with special abilities are enhanced when teachers have knowledge of their needs and how to cater for them, teacher education has an important role to play in this regard.
2. Low priority may be given to the appropriate education of children with special abilities if teachers lack awareness of their needs. It is important, therefore, that all student teachers receive some training in this area at the pre-service level.
3. Because the teacher and the school environment have a major role to play in allowing potential to be realised, teacher education must include input on identification of talent and strategies for talent development.
4. Identifying and developing talents of children with special abilities is part of a teacher's responsibility to cater for individual needs and develop the potential of all students.

### **Programme Structure**

5. Specific education in teaching children with special abilities may be best left to near the end of an initial training programme, but discussion of children with special abilities should occur throughout the programme. Accent on individual differences alone, may not provide students with sufficient background to cater for the needs of able students.
6. Initial teacher training should prepare teachers to cater for children with special abilities in the regular classroom. Once teachers have classroom experience, in-service training should further develop their

knowledge and skills in catering for these children. Further specialist study should be available to those wishing to take a leadership role. Learning outcomes of initial teacher education, classroom experience and continuing professional development and study, in regard to children with special abilities, should include development of certain personal characteristics and attitudes, and professional competencies.

7. Practical experience in working with children with special abilities should be an integral part of the teacher education programme.

### **Course Content**

8. A minimum level of competency for student teachers should include knowledge of the characteristics and needs of gifted learners, of identification strategies and of teaching strategies which will challenge children to develop their potential.
9. Teacher education courses should help students to identify and cater appropriately for the special abilities of Maori children and of children from differing cultural backgrounds.

### **Learning/Teaching Styles in Teacher Education Programmes**

10. Learning strategies which are effective for children with special abilities, are also effective learning methods for student teachers to gain an understanding of how to cater for individual needs, including special abilities. Teacher educators should incorporate into courses varied teaching and assessment methods, metacognitive approaches, and opportunities for students to develop their creativity, self confidence, strengths and interests.

## ***Recommendations :***

### **Learning About CWSA in Teacher Education Programmes**

Student teachers should be introduced to conceptions of special abilities, ways to identify talents, and strategies to cater for the needs of children with special abilities in the classroom. Their training should include more opportunities to work with individuals and small groups of able children than are available at present. Associate teachers in schools need to be trained through Colleges to support students in this work, while they are on teaching practice postings. Enrichment classes for children could also be run by lecturers and students in CWSA courses, on College and university campuses. Individual student teachers with a particular interest or talent could also be paired in a mentorship capacity with a child with an ability in the same area. These could be long-term relationships, not necessarily occurring during regular teaching experience postings.

While Colleges should continue to present courses in ways which suit their own structures, they need to ensure that all students receive at least a minimum amount of training in regard to children with special abilities. A mandate from the Ministry of Education would ensure that this occurred. If the two unit standards within *Assessment and Programming in Special Education* were to be adopted as a requirement for all students, then they would gain a theoretical background and the ability to assess, plan and programme for the needs of individuals with special abilities. This learning could occur in the latter part of a training programme, in the context of a CWSA course, a module within a special needs course or in a programme such as the *Multiple Abilities Program*.

All curriculum courses should introduce strategies on how to cater for those with special abilities in particular subject areas, in accordance with statements in new curriculum documents.

Communication between departments within Colleges and universities is necessary, so that theories and strategies presented in CWSA, special education, professional studies, curriculum and other courses complement

one another. Teacher educators may need professional development in regard to recent theories of educating gifted learners.

As a continuation of the initial training programme, further professional development at Colleges should be available for those in their first year of teaching. This in-service development would provide an opportunity for beginning teachers to reflect on personal experience and develop further knowledge and skills.

### **Further Research**

Research which compared and evaluated the effects on the classroom practice of beginning teachers who had undertaken pre-service courses on CWSA, and those who had undertaken courses which incorporated discussion of children with special abilities into them, could provide valuable information. Some insight could be gained into the effectiveness of varying contexts for learning about children with special abilities in initial teacher education.

Internal evaluation of courses could also be conducted. For instance, at Edith Cowan University, action research in regard to the course, *Catering for High Ability Students*, allowed teacher educators and students to jointly increase the effectiveness of the course. This type of research could be applied to courses in New Zealand Colleges.

As there are limitations to the amount of pre-service training which can be provided on children with special abilities, in-service education should build on from initial teacher education courses. Study of graduate and in-service programmes in New Zealand and overseas may point to ways in which a continuum of professional development could be established.

Research into how teachers can best be trained in recognising and catering for Maori children with special abilities, would allow this area to become a more integral part of a teacher education programme.

## ***Summary***

This thesis does not purport to have provided a full range of data on present pre-service provisions on children with special abilities in New Zealand and overseas. Limitations to doing this included the questionnaires being filled in to varying degrees of comprehensiveness, interviews being conducted at only three of the six Colleges, and reports on overseas provisions being limited to three countries and from institutions where references to provisions were available. However, by using interviews as well as questionnaires and by reporting on some overseas provisions, the data gathered built on to that of previous studies. Sufficient information was gathered, on which to base sound principles and make recommendations for the future.

Within Colleges and universities in New Zealand, there is obviously growing interest from student teachers in learning about children with special abilities. There is also a gradual increase in commitment from teacher educators to the provision of courses entirely or partly devoted to the study of children with special abilities. The guiding principles and recommendations for practice and research outlined in this study could provide a basis for examining present practices and planning future initiatives.

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## ***Appendix 1***

July 21 1994

Dear Principal

I am writing to seek your assistance in the completion of the enclosed questionnaire.

I am an adviser on students with special abilities, working with schools in the Wellington area. As part of my Master of Education degree through Massey University, I am carrying out a research thesis into pre-service education in teaching children with special abilities ( gifted and talented ) at the primary school level. I propose to report on the current situation in New Zealand and on some models of training used overseas, and then make some suggestions for possible future directions in New Zealand.

To obtain an accurate and complete overview of the New Zealand situation, it is very important that the questionnaires are returned from all six Colleges/Schools of Education.

I would ask that input into replying to the questionnaire be sought from personnel in all those areas of your College / School of Education which provide either specific courses or include some training in how to cater for children with special abilities at the PRIMARY SCHOOL level. I have, therefore, enclosed multiple copies of the questionnaire so that they can be passed on to personnel in off-campus training facilities and to each Head of Department to fill in the parts relevant to their Department. Please note that the area of focus for this thesis is PRE-SERVICE EDUCATION only.

Specific Colleges/Schools of Education will not be named in the reported collation of data from the questionnaire. However, it may be desirable for me to further follow up some instances of provision to study in more depth. It is therefore necessary to include the name of your institution on the questionnaire, so that approaches for permission to seek further information can be made.

A preliminary report of the findings will be sent to you, and on completion of the thesis, a summary of the research and suggestions for possible future directions. As very little research has been carried out in this area in New Zealand, I hope that you will find the information of use to you.

Please return the questionnaires to me in the enclosed, stamped addressed envelope, by August 26.

Your help with this request is greatly appreciated. Thank you very much for your time.

Yours sincerely

Shirley Taylor

## QUESTIONNAIRE

### PRE - SERVICE EDUCATION IN TEACHING CHILDREN WITH SPECIAL ABILITIES AT PRIMARY SCHOOL LEVEL

This questionnaire has been sent to each of the six Colleges/Schools of Education which provide pre-service education for prospective primary school teachers.

The information collected will be used for an M.Ed thesis which aims to:

- describe existing provisions in New Zealand for pre-service education of primary school teachers in catering for children with special abilities
- report on overseas models for providing training
- suggest possible future directions for teacher education in New Zealand

Names of individual Colleges/Schools of Education or personnel will not be published.

**Please fill in only those parts of the questionnaire relevant to the programmes for which you are responsible.** A College/School of Education can return multiple copies to me in the envelope provided.

Please return the questionnaire by August 26 to:

Shirley Taylor  
Programme Enrichment Centre  
Brentwood School  
Brentwood St  
Trentham

### COLLEGE OF EDUCATION

Number of primary service students: 1993 \_\_\_\_\_  
1994 \_\_\_\_\_

### INTRODUCTION

Children with Special Abilities, also known as Gifted and Talented children, are those who have exceptional potential in one or more of the following ability areas:

general intellectual  
specific  
creative  
social, ethical and aesthetic  
visual and performing arts  
psychomotor  
culturally valued abilities  
leadership

## QUESTION 1

1.1 Does your College/School of Education provide a course for primary service students which focuses *ENTIRELY* on CHILDREN WITH SPECIAL ABILITIES?

YES  NO  Please tick one

If yes, please answer the rest of question 1.  
If No, please go straight to question 2.

1.2 Is the course

COMPULSORY  OPTIONAL  Please tick one

1.3 Of what duration is the course on children with special abilities?

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1.4 To which students is the course offered? \_\_\_\_\_

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1.5 How many students took / will take the course in:

1993 \_\_\_\_\_ ( out of possible total of \_\_\_\_\_ )

1994 \_\_\_\_\_ ( out of possible total of \_\_\_\_\_ )

1.6 Please provide an outline of course content (attach, if desired ).

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Please add any information below which clarifies, or elaborates upon your answers to Question 1.

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## QUESTION 2

2.1 Are courses provided for pre-service students which INCLUDE SOME COMPONENTS in the teaching of children with special abilities ( CWSA ) ?

YES  NO

2.2

Are these courses provided in:

( Please fill in the appropriate sections )

( Please fill in the appropriate sections )	Course Duration	Approx. amount of time spent considering CWSA	Numbers of students (1994)	To which students is the course offered ?
SPECIAL EDUCATION				
CURRICULUM AREAS				
PROFESSIONAL STUDIES				
MAORI / MULTICULTURAL STUDIES				
OTHER ( Please state )				

Please add any further information you wish, in regard to these courses.

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**QUESTION 3**

**3.1 Do any of your primary service students undertake university papers on teaching children with special abilities?**

YES  NO  Please tick one

**3.2 If yes, how many students are enrolled in such papers in 1994?**

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**3.3 What are the names of the papers and their levels?**

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**3.4 What is the name of the University offering the papers?**

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**QUESTION 4**

**4.1 Please outline below any rationale or research base which guides the type of education in teaching children with special abilities, provided in your College/School of Education.**

**QUESTION 5**

**5.1 Please describe any factors which place limitations on the type and/or amount of tuition provided, in regard to teaching children with special abilities.**

Please add any information you wish which further explains how primary service students in your institution receive tuition in teaching children with special abilities.

Thank you for taking the time to fill out this questionnaire. Your contribution to this research is very much appreciated.

## ***Appendix 2***

### ***Core Interview Questions***

- 1.1 Do you think that gaining an understanding of:  
the needs of CWSA  
and how to cater for them in the classroom  
should be included in a pre-service education  
programme ?
  
- 1.2 Should this area be introduced throughout the course,  
early in the course, or toward the end ?  
(particularly if 3 or 4 year course)
  
  
- 2.1 What overall philosophy or rationale in your College  
guides the way in which primary service student  
teachers receive education in teaching CWSA ?  
  
Or does it vary depending on the Department  
concerned ?
  
- 2.2 *Has the philosophy changed over time or has this  
view historically prevailed here ?*
  
- 2.3 *In what ways might this philosophy be reviewed or  
modified ?*
  
- 2.4 What influence do schools have in the emphasis  
given here to the area of special abilities ?
  
  
- 3.1 What factors limit the type of provision or amount of  
time devoted to teaching students about CWSA ?

- 4.0 I'd like to explore the contribution of students' practical teaching experience in schools. in regard to learning about CWSA
- 4.1 Are any specific briefs or assignments given to students regarding teaching, interacting with or observing CWSA ?
- 4.2 *How do you see teaching sections contributing to students' knowledge & understanding of teaching CWSA ?*
- 4.3 *In what ways might sections become more focused on the area of CWSA ?*
- 5.0 Are there any further comments you would like to offer in regard to how primary service students receive tuition about CWSA ?