SECONDARY SCHOOL SUBJECT CHOICE

An Ethnographic Study

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ABSTRACT

This study of subject choice followed two groups of pupils through the decision-making process at two state, co-educational high schools in the North Island of New Zealand. The high schools were similar in size, location, ethnic composition and range of home background of pupils, but had differing option systems.

At the end of their form two year, 53 children (27 boys, 26 girls) were interviewed at their respective primary or intermediate schools while they were considering the options offered to them in form three at one of the two high schools. The children were re-interviewed the following year at their respective high schools. A further 37 pupils (17 boys, 20 girls) were interviewed in form four at their respective high schools while they were choosing fifth form subjects and were re-interviewed the following year after they had experienced the subjects they had chosen. All children in the study were chosen by their teachers as being representative of the range of pupils at their schools, in terms of ability, ethnic origin and home background.

In addition, parents of eight of the younger children were interviewed in their homes and 31 teachers, representing all the subjects offered to the children at the two high schools, were interviewed at their respective schools.

Analysis of interview transcripts showed that pupils' decisions were influenced by the structure of the option systems, the attitudes of parents and peers and by the overt and covert actions of teachers. Access to information was found to be a key component of decision making. Children's and parents' views about the school subjects showed a strong measure of agreement, but there was less agreement between children's views and teachers' views.

A model of decision making was elicited from the data and case studies illustrated the range of pupils' individual experience, in particular, the experience of Maori pupils identified as 'winners' and 'losers' in the school system.

PREFACE

Because some of the terms used in this study are not universally applied in the literature, a note of explanation is necessary. 'Subject choice' is taken to mean the pupil's choice of one optional school subject rather than another, and a 'subject' is identified as a body of knowledge, skills and processes defined by syllabus and allotted a proportion of the total school timetable.

Although some writers refer to 'course selection' and 'curriculum choice', these terms are not always synonomous with subject choice. 'Course' is frequently used in the literature to denote a package of allied subjects, and 'curriculum' generally describes the total range of subjects offered at an educational institution.

The terms 'streaming', 'tracking' and 'banding', often closely associated with subject choice, are all used in the literature to denote the practice of grading pupils in classes according to their presumed ability. Rigidly streamed schools may direct their pupils to a narrow range of options deemed suitable for particular levels of ability; other schools may exercise a lesser degree of control.

At the time of writing, third and fourth formers in New Zealand schools are obliged by state regulation to take a compulsory core consisting of English, maths, social studies, physical education, music and/or art. Two or three other subjects are generally offered as options, but the number of options allowed and the range of choice varies from school to school.

Children taking part in the study were approximately twelve years of age in form two, thirteen when they transferred to secondary school, and fifteen in their fifth form (School Certificate) year.

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INTRODUCTION

OVERVIEW: A general picture is given of the aims and implications of previous research into pupils' subject choice and a rationale is offered for the present study.

The present study arose initially from the researcher's interest in pupil motivation. As a teachers college lecturer engaged in helping trainees to become effective teachers in a variety of subject areas, the researcher was, among other things, interested in understanding some of the reasons why pupils might choose to take one optional subject rather than another. Aside from their relevance to pupil motivation, such reasons might also shed light on pupils' stereotyped thinking on subject relevance, another of the researcher's concerns. Furthermore, if pupil choice were to be found generally more of an illusion than a reality, then there would be important implications for the current child-centred philosophy of education at present propounded in teachers colleges in this country.

The question of what should be taught to whom is as old as education itself, but the notion of individual choice of curriculum in an institutional setting has gained favour only in recent years and is still hotly debated. Major issues concern the rights of educational institutions to prescribe the conditions of entry to their courses and the effects of such prescription on certain groups of pupils, the demands of society for particular kinds of expertise and the ability of individuals to make rational choices at an increasingly early age.

In Great Britain, the matter of choice has long been secondary to the matter of academic ability, which has been emphasized by a two-tier system of state schooling (grammar/non-grammar) and also by streaming within schools on the basis of I.Q. and academic performance. Even with the introduction of comprehensive education, streaming has persisted (Pedley, 1967) and is claimed by some to be a potent instrument for the perpetuation of social class differences (Jackson and Marsden, 1962). In the United States, where greater pupil choice has theoretically been possible, the disadvantage of ethnicity and socio-economic status, together with the continued organization of curricula into discrete courses, are claimed to limit the choices of

certain groups of pupils (Cicourel and Kitsuse, 1963; Kahl, 1961).

The New Zealand situation differs from that in Great Britain in that all state schools are comprehensive. To a large extent the extreme restrictions of streaming have disappeared, although according to the New Zealand Baseline Survey (1981), broadbanding is widespread. Many New Zealand pupils therefore have what appears to a genuine choice available to them. At third and fourth form levels they must follow a core curriculum established by the state, but in addition are expected to choose up to three optional subjects. At fifth and sixth form levels, English is the only subject that is compulsory by regulation for School Certificate and University Entrance candidates, although individual schools may have their own regulations concerning other subjects. Senior pupils are not restricted by the need to choose University pre-requisites other than English, and the decision not to take science, mathematics, or a language does not preclude acceptance at a university, although it may preclude further study of those subjects.

If pupils are permitted to choose some of the subjects they study in school, it is important that educational planners should be aware of how these choices are likely to be exercised and also have some understanding of the factors likely to affect pupils' decisions to take, or not to take particular subjects. Overseas evidence suggests that, in some cases, pupils have only the illusion of choice because such factors such as lack of information (Jackson, 1964), peer pressure through the development of a counter school culture (Willis, 1977), teacher expectations (Brown and Fitzpatrick, 1983) and stereotypical rôle expectations (Kelly, 1981; Tobias, 1978) influence their decisions.

Recent research has concentrated on the sociological aspects of socio-economic status, ethnicity and sex, and has been concerned with the decision making strategies of individuals only as exemplars of broader group perspectives. Researchers have noted that where free choice of subjects is offered, certain groups remain at a disadvantage and have achieved no greater mobility within the education system than in the past. Children from working class homes (Woods, 1979) and ethnic minorities (Kahl, 1961) continue to be found in disproportionate numbers in non-academic, non-examination classes which preclude access to higher education and professional occupations; and

although girls often do well at school they frequently aspire to occupations well below the level of their academic ability (Spender, 1981) and avoid subjects such as mathematics and science, thereby excluding themselves from the growing numbers of occupations in science and technology (Kelly, 1981), while holding unrealistic expectations of employment in women's traditional spheres such as office work and the service industries (Abigail, 1981). It is claimed that this results in a wastage of talent (Sutherland, 1981) and that in some cases pupils are unwittingly educating themselves for unemployment (Earley, 1981; Poole 1982).

Some of the wider repercussions of pupil choice are seen in a declining demand for foreign languages (Klayman, 1978), and in a swing away from the physical sciences (Duckworth, 1981). These have led to moves in the United States towards re-introducing language pre-requisites for college entry, and in great Britain to a growing demand for the establishment of a compulsory core curriculum for pupils up to the age of sixteen, because it is argued that state intervention is required to protect knowledge areas of national importance from undersubscription (Morgan, 1980).

Nevertheless, research into how and why pupils make particular decisions is at an embryonic stage. Much is of a purely descriptive nature, and little is known about how individuals make their choices. Some researchers have looked into the part played by teachers and counsellors in channelling pupils towards particular subjects or courses (Jackson, 1964; Cicourel and Kitsuse, 1963), and some have looked at the over-all patterns of choice made by pupils attending a number of schools in a given area (Ryrie et al., 1979; Reid et al., 1974). More recently, attention has been paid to the concerns of pupils and their parents in studies that acknowledge the process of subject choice as playing a major part in differentiating between pupils within a school (Ball, 1981; Woods, 1979). But there is still a need for in-depth study of the means by which individuals categorize the subjects offered to them and of the criteria they use to make their choices.

The aims of the present study are thus to identify the major concerns of pupils choosing optional subjects at secondary school, to follow pupils through the decision making process, and to find out if they are subsequently satisfied with their choices. Particular

emphasis is given to an examination of pupils' and parents' expectations of the subjects offered and teachers' expectations of the pupils choosing particular subjects. This is because previous research has suggested that there may well be a mismatch between the expectations of home and school (Willis, 1976; Jackson and Marsden, 1962). The research methodology is essentially ethnographic and phenomenological for reasons that are set out in Chapter Two. No hypothesis is tested, but an attempt is made to construct models of decision making using a grounded theory approach.

Findings of the study could have some relevance to the debate concerning the core curriculum versus open subject selection; they could be of value to school guidance personnel; they could interest people wishing to promote particular subjects; but above all, they could lead to a greater understanding of the concerns of individuals and the extent of their real freedom to choose. The study could shed some light on the related issues of streaming, sex-stereotyping and educational disadvantage. Not least, it could help us begin to address the question of whether curriculum decisions should be made in the interests of the individual or in the interests of the state where such interests are found to conflict.

CHAPTER ONE

REVIEW OF THE LITERATURE

OVERVIEW: A brief historical outline of research relating to subject choice is given. Then each contributing field of research is examined in more detail. A summary of findings is made. This is followed by a consideration of the areas which appear to need further investigation.

1.1 Historical outline.

Although research into subject choice as such did not begin until the 1960's, earlier research in a number of related areas has made a significant contribution to the total picture. A summary is given in Figure 1, p6.

Among the first researchers to make a contribution were psychologists who as far back as the 1930's were examining personality variables related to school achievement. At the same time, other researchers were looking at children's subject preference. By the 1950's research interest had moved towards an investigation of aspects of occupational choice, and this was followed by an examination of the rôle of guidance in influencing pupils' occupational decisions. By the 1960's it was realized that school guidance personnel played an important part in allocating pupils to courses and in influencing educational outcomes.

Researchers then began to look at the phenomenon of educational disadvantage. In Britain they were concerned with socio-economic or class differences, particularly within a system of ability-streaming; in the United States they were interested in tracking as related both to socio-economic status and ethnicity. School type was a further variable investigated particularly by British researchers.

By the mid 1960's a great deal of attention was being paid to sex differences identified through a comparison of the achievements, expectations and aspirations of boys and girls at school, and girls were frequently seen as disadvantaged in terms of educational outcomes.

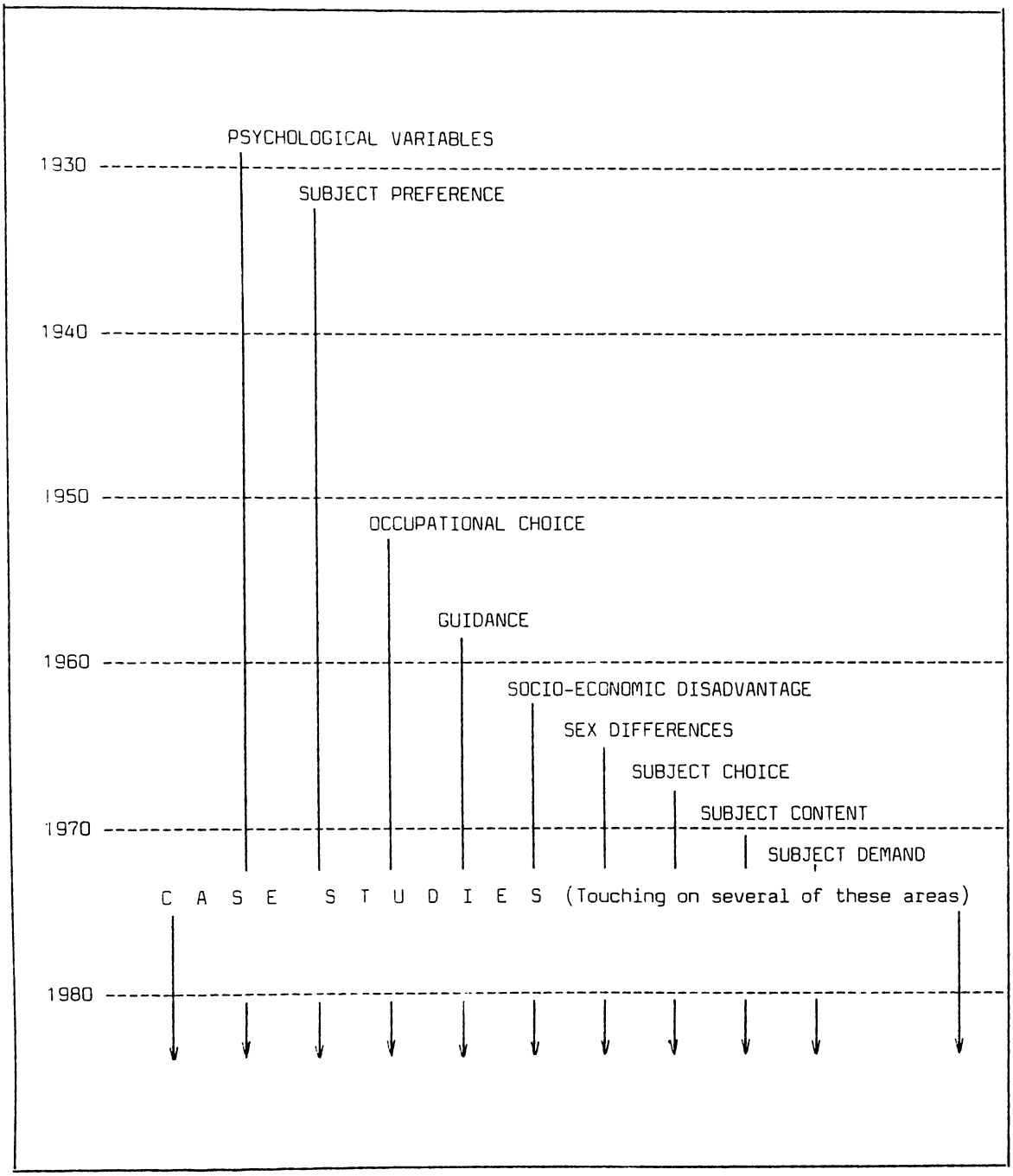


Fig. 1 GROWTH OF RESEARCH RELATING TO SUBJECT CHOICE

By the 1970's the attention of sociologists was turned to the content of school subjects and a sociology of knowledge was identified. The phenomenon of fluctuating subject demand and the effect this had on the common pool of knowledge was also recognised.

Subject choice as a research focus appeared in the late 1960's and early 1970's. It became apparent that a large number of variables were likely to have influenced pupils' choices, which in turn were seen as influencing pupils' occupational choice.

Since the beginning of the 1980's a number of case studies have examined subject choice in the wider context of schooling and have drawn together some of the varied concerns of earlier researchers. Factors influencing pupils' subject choice have been seen as having a bearing on the differentiation of pupils at school and have been recognised as controlling pupils' access to higher education and professional occupations.

Contributions to the sum of knowledge relating to subject choice made in each of the above areas will be examined in more detail in the sections that follow.

1.2 Psychological variables.

One of the variables thought to have potential as a predictor of school success and of achievement in society at large is intelligence as defined by the results of intelligence tests or tests of scholastic ability. The Binet-Simon scale was published in 1905 and other intelligence tests soon followed. Tests were shown to be able to differentiate between certain groups of people. The U.S. Army General Classification Test, for example, showed that men who enlisted from the professions averaged scores over 125, with a general population mean of 100. Groups averaging under 100 were generally from unskilled occupations, but unfortunately, the fact that variations within groups were sometimes as wide as in the population at large was ignored. No study has been able to isolate I.Q. alone as a predictor, either of academic achievement or of interest in a particular field. Indeed, Douglas (1968) quoted a study by Masters and Hockey, who found that that 70% of boys who went to British public schools after failing the eleven plus examination subsequently gained five or more passes at 'O' Level and two or more

passes at 'A' Level. Faith in the predictive power of I.Q. scores has nevertheless led to a widespread use of streaming or tracking by schools. These practices, as they relate to subject choice, will be discussed in more detail later in this review.

In 1927, Strong developed a Vocational Interest Blank which was used to accumulate information about the wider interests of people in a wide range of occupations. Kuder, in 1939, produced another scale which categorized people by broad interest areas (such as literary, computational and persuasive). Such scales were used in counselling young people in the belief that interest patterns could be used to predict occupational decisions.

Personality variables also began to interest psychologists. Factor structures have been proposed by Eysenck, Cattell, Guilford and others, but there is by no means uniformity of agreement about the basic elements of personality. Again, personality alone does not appear to have a great deal of influence on such things as subject interest or school achievement. In a study of 1,000 Scottish school children by Butcher (1969) no strong relationship was apparent between personality and subject orientation, and it was found that pupils' ratings of school subjects and of careers appeared to be better predictors of arts or science orientation than school marks or course chosen in the third year. However, Katz and Fleming (1971) did find that there was a predominance of different personality types (vocational, academic, social and non-conformist) among Australian undergraduates in various faculties. The commerce, engineering and science faculties, for example, had more vocational students, and the arts faculty had more non-conformists.

1.3. Subject preference.

An early study of subject preference among British grammar school pupils by Pritchard (1939) examined an entirely academic curriculum. The subjects were: English, French, Latin, history, arithmetic, geometry, algebra, chemistry and botany, the latter being a girls-only subject. Over eight thousand boys and girls responded to a questionnaire asking them to rank the subjects and requiring them to give reasons for their first and last preferences. The results were collated by subject, sex and age of pupils, and by type of school attended (co-educational or single-sex).

The study found differences in the subject preferences of boys and girls, and apparent age-related differences. (Apparent, because this was not a longitudinal study.) There were also differing responses from pupils attending the different types of schools. Chemistry was ranked first by the majority of boys up to the age of fifteen, and it was third for those aged sixteen. Geometry was ranked either ninth or tenth by boys in each age group. The girls' preferred subject at all ages was English. Older boys also placed English first, though it was ranked second or third on average by other groups of boys. Younger girls ranked chemistry third or fourth, but it was less popular with older girls who ranked it sixth or seventh. Geometry was ranked either tenth or eleventh by all groups of girls.

There were greater differences between boys and girls among those attending co-educational schools. Boys in co-educational schools, for example, ranked French in tenth place, whereas boys in single-sex schools ranked it fifth; girls in co-educational schools ranked chemistry eigth, but those in single-sex schools ranked it in fifth place. Pritchard found that two reasons for subject preference stood out above all others. These related to pupils' professed interest or lack of interest in the subjects, and to pupils' estimations of their ability or lack of ability in the subjects.

A year after the publication of Pritchard's findings, Shakespeare (1936) reported on a similar study of over nine thousand boys and girls at elementary schools in London and Worcestershire. The curriculum examined in this study was broader and less academic. It included handwork, drawing, nature study, singing, geography, drill, history, reading, arithmetic, literature, dancing, composition, spelling, grammar and scripture (in order of preference for ten-year-old boys). Again, Shakespeare found sex differences. Girls in the two groups studied (aged ten and thirteen) ranked dancing second and first respectively, whereas boys ranked it ninth and eleventh. Arithmetic was last in the list for older girls and second to last for younger girls, whereas the two groups of boys ranked it ninth and tenth respectively. Shakespeare suggested that both boys and girls showed a tendency to prefer subjects in which perceptible results might be obtained. The study also noted regional differences. Reading and composition, for example, were rated higher by girls in London, while less academic subjects such as

needlework and domestic science were preferred by girls in Worcestershire. There was also remarkable constancy of preference when 'fast' groups were compared with 'slow' groups, but among boys there were more positive attitudes to arithmetic, poetry and recitation in the 'fast' groups.

Although subject preference is not synonomous with subject choice, these early studies by Pritchard and Shakespeare point to the likelihood that, given a choice, children would respond to many and varied influences, particularly related to the expectations of age and sex, and also related to school type and location.

A more recent study of subject preference (Ormerod, 1975) surveyed over a thousand boys and girls in fifteen British schools (grammar and comprehensive; co-educational and single-sex) in four major regions. Using a Brunel Subject Preference Grid, Ormerod found sex differences in subject preference and also noted that girls in single-sex schools showed a greater preference for 'male' subjects, whereas in co-educational schools, girls' and boys' preferences were more polarized. In this study both boys and girls showed a greater preference for history in single-sex schools.

1.4 Occupational choice.

Because studies have since shown that commitment to an occupation may be an important reason for subject choice (Woods, 1979; Ryrie et al., 1979), research into occupational choice can now be seen to have some bearing on subject choice.

Ginsberg et al., (1951) defined three stages of commitment to an occupation in boys aged six to seventeen. These were: a fantasy stage, in which children stretched the bounds of possibility, a tentative stage, in which adolescents made rational consideration of their interests, abilities, education and personal values, and finally a realistic stage. Ginsberg et al., claimed that these stages would relate reasonably well to girls but could be complicated by a girl's commitment to marriage rather than a career. In general, however, young people could be expected to move from fantasy-based to reality-based career choices as they advanced in age.

Super (1961) outlined a view of occupational development based on

the work of Carter (1940) in vocational attitudes, Bordin (1943) in occupational stereotypes and self-concet, Lecky (1945) in self theory, and Allport (1943) in the concept of ego. Super defined vocational development as the process of implementing the self-concept, and outlined five phases: exploration, self-differentiation, identification (particularly sex identification), reality testing and implementation. He noted that boys developed attitudes and interests commensurate with their abilities, but girls frequently adopted rôles prescribed by society. However, he argued that each person had potential for success and satisfaction in a number of occupations, given compatibility between the individual's self concept and his or her perceived occupational rôle requirements. Super investigated fifteen values in his values inventory (1970) and found differences between children relating to age and sex. A New Zealand study (Roberts, 1980) using an adaptation of the inventory found ability differences as well as significant age and sex differences. Most notably, girls were found to have higher scores on altruism and aesthetics than boys, who scored higher on money and way of life as work values.

In considering research into vocational choice, particularly in the area of work values, it is worth noting that there is some evidence of changes in personal values as a result of experience (Super and Crites, 1962; Bordin and Wilson, 1953), and also that research into cognitive dissonance suggests that values consistent with choice become stronger, while those that are inconsistent become weaker.

Recent research has suggested that perceived relevance to a particular occupation has become important in influencing pupils' selection of school subjects (Woods, 1979; Ryrie et al., 1979; Reid et al., 1974), although it has been noted that choice of subjects may be made before the modal age of occupational choice (Pheasant, 1961). A study of pupils in eight Scottish schools (Ryrie et al., 1979) found, however, that the supposed links were often tenuous. A boy who wanted to join the mounted police, for example, said that biology would help him understand the horses, and a girl who wanted to be a cook said that typing would enable her to type the menus.

It is possible that pupils would be more likely to nominate subjects as being 'useful in a job' during periods of high unemploy-

ment rather than during periods of high employment. However, no long term study has considered this possibility.

1.5 Socio-economic disadvantage.

A number of reports in Britain and elsewhere have highlighted the existence of disadvantaged groups within systems of state education (Nash, 1983; Berthoud, 1976; Jencks, 1972; Douglas, 1968; Newson, 1963). It was apparent in Britain, even after grammar school education was ostensibly opened to all able children by the 1944 Education Act, that working class children were disadvantaged both at school and in their working life, and some of the research into socio-economic disadvantage undertaken in the 1960's was to have an important bearing on subsequent studies of subject choice.

Jackson and Marsden (1962) conducted a retrospective study of 88 successful grammar school children from working class homes to find out why they had succeeded despite the apparent odds against them. These researchers discovered that problems concerning subject choice had been due mainly to ignorance of the consequences and reluctance on the part of parents to challenge the system. The most serious consequences were identified as choosing the wrong subjects at the age of eleven for a career in medicine, and not choosing at School Certificate level the pre-requisites for university (for example, Latin, which was then necessary for an arts degree). The most crucial decisions affecting this group of children were identified as being: the decision whether to accept a grammar school place or not, the school's decision to place the child in an A, B or C class (illness and birth date apparently having some bearing on this), the children's subject choice (particularly between Latin and German, and between arts and sciences), and the decision to leave school at the end of form five or stay on into the sixth form.

The study found that successful working class children tended to come from homes where one parent had been accepted for grammar school or had received grammar school education; they generally attended primary schools whose pupils were not all working class; they generally came from smaller families or were younger children, and their parents were particularly active in the community. Although Jackson and Marsden did not focus on sex differences, they did note one fact without comment. This was that in their original

cohort study of grammar school children from working class homes there were half as many girls as boys. This was because there were two boys' grammar schools in the area, but only one for girls. Thus working class girls were doubly disadvantaged.

Although in the United States there was never a grammar/non-grammar school structure, the organization of courses has nevertheless had the effect of creating schools within schools. A study by Kahl (1961) focused on 24 'common man' or working class boys, all of whom were identified as having the ability to aim high but the background to aim low. Twelve of the boys were in college preparatory classes and had marks in the top half of their class; twelve were not in college preparatory classes and did not plan to go to college. The aim of the study was to examine variables which could account for placement. Kahl noted that in no case did a by find in schoolwork sufficient intellectual satisfaction to supply its own motivation and there were no cases in which a sympathetic and encouraging teacher had successfully stimulated a boy to high aspirations. He found that the boys were most likely to pursue academic goals if they had early school success and had a self concept in which school performance was vital, if alternatives such as sport had not proved successful, if the family rewarded work and the boy was not in conflict with his family, and if the boy and his parents thought school work was important for a future career.

1.6 Ability streaming.

British studies of socio-economic disadvantage began to find that working class pupils were over represented in the lower streams of ability-streamed schools, and also found a number of important differences in attitudes to school between pupils in the different streams.

Hargreaves (1967) found that high-stream groups in a secondary modern school developed a positive orientation to academic values, and the reverse was true of low streams. Thus the informal processes of differentiation based on friendship groups largely echoed the formal structure of the school. Because of the development of anti-school attitudes among low stream pupils, Hargreaves argued that in the fourth form as a whole teachers were led to believe that there was a greater ability range than really was the case.

Lacey (1970), studying a north of England boys' grammar school also analysed the school's social system in terms of differentiation and polarization. He defined differentiation as the product of the normative academic value system which acknowledged differences between pupils by ability streaming. Polarization, in contrast, was defined as the product of pro- and anti-school cultures closely allied to the streamed groupings. Lacey concluded that the disappointing performance of working class boys in grammar schools since the 1944 Education Act was emphasised by the deliberate actions of the school and supported by the cultural allegiance of working class pupils.

More recently, a study by Willis (1976) has analysed the phenomenon of counter-school culture in terms of a Marxist philosophy, maintaining that the entrenched expectations of working class boys in a capitalist society result in the perpetuation of working class culture through the informal friendship group, despite the efforts of the school to impose middle class attitudes and values on its pupils.

Though not specifically dealing with subject choice, Hargreaves, Lacey and Willis have shown how streaming may serve to exaggerate the differences between pupils. When different ability groups are further differentiated by exposure to different curricula, the future expectations of pupils in terms of access to higher education and to certain occupational groups may be seen to be largely controlled by a system imposed when British children reach the age of eleven, and sometimes even earlier, according to Jackson (1964). In his study of 660 British schools, Jackson noted that 50% of the pupils surveyed had been streamed on entry to the infant department of their primary school, 74% were streamed by the age of seven, and 96% by the age of ten. In Jackson's fourth form grammar school sample, all but one of the children had been selected as grammar school prospects by their seventh birthday.

There is some evidence that mixed-ability classes have advantages over streamed classes. Holt (1978) cites a study by Williamson (1976) in which 23 matched pairs of pupils attending two English comprehensive schools, one streamed and the other unstreamed, were monitored for a five-year period. Pupils at the unstreamed school achieved success in a wider range of subjects, were more positive in their attitudes to school, and were more likely to stay on into the sixth form. However, they blamed the school for lack

of progress, whereas parents of children attending the streamed school were more likely to accept the school's definition of their children and to blame lack of progress on the child.

Tracking in many American schools is in some ways similar to the ability streaming practised in the British school system. Generally the tracks differentiate between students' presumed destinations by offering academic, general, commercial or technical curricula. Students may choose their courses, but before being accepted into an academic course they must generally satisfy the school as to their suitability. High ability and high socio-economic status have been found to increase the likelihood of placement in an academic course, the main function of which is to prepare students for college entry (Alexander and McDill, 1976).

1.7 School guidance.

The studies by Jackson and Marsden and by Kahl suggest that access to information, parents' own experience, parents' expectations for their children and certain personal and sociable variables may affect the performance of working class children at school. A study by Cicourel and Kitsuse (1963), however, found that school personnel played a major part in promoting students or excluding them from the educational contest.

Cicourel and Kitsuse set out to test Turner's (1960) hypothesis that the British educational system was characterized by 'sponsored mobility' in which élite status was given on the basis of some criterion of supposed merit, and could not be taken by any amount of effort or strategy; in contrast, the American system was characterized by 'contest mobility' in which élite status was the prize in open contest, taken by the aspirants' own efforts. Cicourel and Kitsuse focused on the mechanisms of social differentiation in a case study of a large American High school. They aimed to investigate:

> "... how the high school as a socially organized system of activities differentiates talented from average and low ability students and how such activities may affect the future occupational careers of the student population." (Cicourel and Kitsuse, 1963, p12-13)

In order to do this they interviewed a random sample of 100 students

before and after their admission to high school. In addition, the parents were interviewed and school counsellors were questioned about their assessment and placing of the students.

The study found that among students from middle and upper class families, college entry was a routinely prescribed characteristic independent of the student's abilities. Placement of students in courses prescribed for college entry was supposedly dependent on students' declared intentions and on their abilities but, in fact, a number of subjective considerations affected counsellors' assessments of students' suitability for admission to certain curricula. For example, of four students who obtained S.C.A.T. (School and College Ability Test) scores of 90-95, two were classified as under-achievers, one as average and the fourth as excellent. The researchers concluded that school personnel were thus able to include or exclude students from the 'contest' and that aspirants' own efforts were neither the only, nor the critical determinants of their qualification as 'contestants'.

A later study by Erickson (1975) also pointed to the control exerted by counsellors who stressed obstacles when counselling some students, while for others they stressed ways of overcoming problems. Another study published in the same year by Reid et al. (1974) looked at pupil placement in, or selection of, different types of courses in five co-educational London comprehensive schools. The core subjects in the five schools were English, maths, P.E. and religious instruction (together with music and social studies in one school) and pupils were expected to take five additional subjects. One school directed its pupils, while the others provided choices. Under one system, pupils selected five subjects from a total of 19 options, but teachers assessed pupils' suitability for the subjects they had chosen. Another system required pupils to nominate first and second choices in each of five blocks of subjects. A third system offered subject choices in one of the following categories: academic, technical, commercial or general. It seems likely that each of these option systems would put its own particular constraints on pupils' choices, but the Reid study focused on the rôle of guidance <u>given</u> the system.

Reid et al. made the assumption that pupils had made incorrect decisions or were misplaced if their capabilities were found to be

either above or below the level to which teaching was directed. Thus the researchers assumed that pupils should be responsible for self-streaming, rather than that teachers should adapt their teaching to the needs of mixed ability classes. Furthermore, the concept of 'misplacement' assumed a hierarchy of subjects, in this case manual subjects were seen as easy and academic subjects as difficult. The researchers gauged pupils' interest in and satisfaction with their chosen subjects by means of a questionnaire which also asked pupils to identify their reasons for making choices. As pupils were not required to differentiate between subjects, the questionnaire assumed that pupils chose all their subjects for the same kinds of reasons. Findings were as follows: Parents were most frequently cited as sources of help (regardless of pupils' ability); a large number of pupils claimed to have made choices unaided; friends rarely appeared to be the most important influence; schools made only a minor contribution to advice; able pupils were more positive and optimistic and less able pupils lacked confidence; a high proportion of pupils chose subjects relevant to a future job, but approximately one third of the pupils were not sure of their future occupation.

An on-going Scottish study into awareness of opportunity by Ryrie et al. published its first results in 1979. In this study it was assumed that the question was not whether pupils were sorted and allocated different routes by schools, but when and how this was done. The study followed a random sample of 74 pupils (37 boys, 37 girls) entering each of eight Scottish comprehensive schools in two successive years (a total of 592 pupils). The pupils were re-interviewed periodically after they left school, their parents were interviewed, and their schools were examined in some detail and with particular emphasis on administration and guidance.

The curriculum offered in all eight schools included a core of English, maths, social studies and/or religious instruction, but there were considerable differences between the options, both in the amount of choice offered and in the structure of the option systems. School 5 offered options under course headings: academic, technical, commercial and general. School 8 had a two-course structure, one course offering a range of essentially academic subjects, the other offering a smaller range of less academic subjects. School 7 also had an academic course and a general course but pupils were allowed to choose options that were common to both. Other school option

systems varied from those which offered mutually exclusive and sometimes very limited option lists to those with mixed, overlapping options providing pupils with opportunities to combine a wide variety of subjects. No system was entirely unmonitored, however, as every school practised some form of ability streaming. Nevertheless, as in the Reid study, Ryrie et al. made no comment on the constraints of the different types of option systems. They also assumed a hierarchy of subjects but noted that the subjects taken by the different ability bands varied from school to school. This is an interesting observation because it meant that although school personnel were of the opinion that only pupils of a certain ability were suited to particular subjects, they did not agree about the levels of ability required.

As has previously been noted, Pritchard (193) found that pupils rationalized their subject preferences in terms of their interests and abilities. However, Ryrie et al. found that pupils were more likely to justify their subject choices in terms of usefulness for a job. It was also significant in the Ryrie et al. study that the third most salient category of explanation (after usefulness in a job and being good at the subject) was in fact non-choice. Pupils who claimed that they had little or no choice in their subject selections gave responses such as "I couldn't take any other" or "I wasn't any good at any of the others, or "The teacher picked it". Nevertheless, the influence of teachers on pupils' subject choice was seen as small by both pupils and parents although there were some reports of stereotyping by teachers, for example, in steering girls away from technical subjects.

1.8 Sex differences.

Ryrie et al. (1979) also identified some marked differences between the subjects taken by boys and girls. Subjects such as secretarial studies, fashion and fabric, anatomy, physiology and health were almost exclusively girls' subjects, and girls predominated in French, German, biology, accounting, food and nutrition and commerce. Similarly, woodwork, metalwork, building drawing and engineering drawing were almost exclusively boys' subjects, and boys predominated in geography, physics and general science. In some cases there was also a relationship between sex and ability band. For example, boys taking biology were on average of a lower band than girls, girls taking physics were generally in top bands, and few boys

in lower bands studied a language.

The Ryrie et al. study noted marked differences in the occupational expectations of boys and girls. Over 80% of the boys mentioned one of 25 occupations (especially motor mechanic and joiner), but over 80% of the girls mentioned one of only 12 occupations (especially nurse, secretary and teacher). This phenomenon of restricted occupational choice among girls has been noted with some concern by other researchers (Earley, 1981, in Australia; McGrath, 1981, and Abigail, 1981, in New Zealand). A disproportionate number of boys in the Ryrie et al. study expected to enter professional occupations (having regard to the census figures for professional employment in the area), but the researchers did not comment on whether or not the boys expected to remain in their home area. The researchers concluded that neither boys nor girls were aware of the reality of employment for them as none of the boys specifically mentioned the steel industry, which was likely to be their major source of employment, and none of the girls mentioned the textile industry, which employed 25% of the female workers in the area.

A study by Bunce (1970) looked specifically at sex differences in the New Zealand context. However, the study could not be replicated today, since both the external examination structure and the internal organization of schools have undergone changes. This study, the only one of its kind conducted in New Zealand, had a possibly serious limitation in that it was entirely retrospective and could therefore have been affected by pupils' rationalizations after the event.

When Bunce was collecting her data School Certificate was a pass/fail package obtained by a minority of pupils in form five. The 960 Dunedin sixth formers were all found to have progressed through the academic streams of their schools and there were few differences in their early schooling. Even the choice that pupils were required to make in form five was, in fact, a decision not to continue with certain subjects. In contrast, the New Zealand School Certificate examination today allows for single subject passes in a wide variety of subjects and thus provides pupils with greater choice. Choosing fifth form subjects is no longer a matter of deciding which subjects to drop; it involves the consideration of a variety of subjects, some of them never before experienced by pupils.

Bunce surveyed the sixth formers by means of a questionnaire which required them to identify reasons for their subject choice at School Certificate level. A list of possible reasons was offered and an 'any other' category was also included. No distinction was made between subjects so it was not evident which subjects were chosen for which reasons. Because of their academic background, all of Bunce's sample had studied French in form three, but as they began to move through the secondary school system the boys had dropped languages and the girls had shown a preference for biology rather than the physical sciences. By the time time they had reached the sixth form, Bunce found that 75% of the pupils had made significant changes to their courses.

Their ability in the subject was the most important factor mentioned by both boys and girls with respect to subject choice, but career interest and timetable limitations were also mentioned. Vocational reasons were given significantly more often by boys than by girls, and girls were more likely than girls to choose subjects according to liking. More than half of both boys and girls claimed to prefer the subjects they thought they were best at, and said that no-one had helped them to make their decisions. An analysis of background variables suggested that subject choice for girls was related to parents' education, but not for boys. Subject choice was also related to pupils' results in tests of verbal, spatial and numerical ability; pupils who gained high scores in these tests had made a clear choice between arts and science subjects, while pupils who had chosen biology as their only science tended to obtain lower scores on all these tests. There was no significant relationship between type of school and the subject choice of girls, but boys who attended single-sex schools tended to choose fewer science subjects than those who chose to attend co-educational schools.

Since Bunce was surveying pupils who had progressed through academic streams, she did not consider subjects such as clothing, home economics, typing, shorthand, woodwork, metalwork and technical drawing in which the greatest sex differences were likely to occur. Among the academic choices made by pupils in her study, however, Bunce noted a considerable variation in the percentages of pupils taking the various subjects in different schools. This suggests that factors specific to individual schools were important.

A more recent study by Brown and Fitzpatrick (1983) has explored the issue of sex-stereotyping of subject choice at two Australian high schools. Over half the optional subjects at the two schools were found to have a boy:girl ratio (or girl:boy ratio) of 4:1. The researchers noted that timetables were based on past experience of subject demand. Thus, if no pupil had chosen both clothing and metalwork in the past, then present timetabling might continue to place these subjects in competition with each other. In one of the schools 32% of year-nine pupils surveyed indicated that the timetable could not accommodate the full programme they initially chose.

Despite timetabling problems, Brown and Fitzpatrick reported that some effort was being made by the schools to encourage boys and girls to think about a wider range of options. They were, for example, required at one school to undergo compulsory sampling of the options in year eight, while at the other school girls were directed towards home science and boys to technical subjects. But even so, the researchers found little difference in the participation rates of boys and girls in these areas at the two schools in subsequent years. They concluded that sampling alone was not sufficient to change the traditional enrolment patterns.

Brown and Fitzpatrick surveyed parents to find out if their opinions were likely to have had some influence on children's choices. The researchers claimed that few parents felt it was inappropriate for boys to do traditionally girls' subjects, and vice versa, but their figures did not appear to support this claim. As many as 31% of parents disapproved of their daughters studying metalwork, and 21% disapproved of their daughters studying woodwork. It was claimed, however, that teachers helped to perpetuate the stereotypes by discouraging girls from taking non-traditional subjects by subtle means: warning them that they would get dirty in metalwork, for example, and saying the machines were dangerous. Teachers also were said to have counselled girls against careers in non-traditional areas on the grounds that they would meet opposition from employers and other workers. In some instances where pupils had countered tradition in choosing their subjects, the researchers reported that social isolation became a problem and could cause a pupil to drop out of a subject because he or she was unable to make friends with class-mates.

Brown and Fitzpatrick concluded that subject sex-stereotyping was supported by school sub-cultures of boys and girls, by the constraints of the timetable, by the messages delivered by teachers, and by the expectations of parents and older friends. They suggested that the subjects chosen by boys and girls are likely to be similar only when careers and hobbies chosen in society at large are similar. However, one could argue against this conclusion by saying that career choices cannot be broadened until all pupils have access to pre-requisite subjects at school.

Two New Zealand studies commissioned by the Women's Advisory Committee to the New Zealand Vocational Training Council (McGrath, 1982; Abigail, 1982) have explored the issue of sex-stereotyping in schools in relation to pupils' career aspirations and career opportunities.

McGrath's report summarized the data she obtained from questionnaires and interviews with pupils, teachers and guidance counsellors in seven schools in the Nelson area. Subject options available to third and fourth formers in the schools varied considerably. Choices were limited in small schools, but in at least one, all pupils were obliged to study woodwork, typing, technical drawing and home economics in their third form year. It has already been noted that Brown and Fitzpatrick (1983) found that compulsory exposure to non-traditional subjects did not increase the likelihood of pupils choosing these subjects when compulsion ceased. However, data collected by Roberts (1982) from twelve Christchurch schools suggested that girls who had been through compulsory courses in technical subjects in their third form year were more likely than others to indicate an interest in a technical career when responding to Education Department questionnaires to sixth formers concerning their career intentions. McGrath made no comment on this possibility even though her major concern was with the vocational outcomes of schooling. She did note, however, that boys and girls did not have equal access to technical subjects in some schools. In two single-sex girls' schools the girls had no access to technical subjects, and in some co-educational schools the practice of pairing woodwork and technical drawing with home economics and clothing was likely to deter girls from choosing the former.

McGrath found that at fifth form level, girls selected a higher percentage of arts subjects than did boys, and girls tended to choose

biology rather than the physical sciences. Almost half the boys chose technical drawing; woodwork and engineering shopwork were also popular among the boys. No girls chose woodwork or engineering shopwork as a fifth form subject and less than 2% of the girls took technical drawing. Shorthand and typing were taken by 42% of the girls in the fifth form.

Teachers and counsellors who were asked by McGrath to account for the variations in subject choice between boys and girls and to comment on the differences they saw in the attitudes of boys and girls at school offered a very broad range of opinions. Some of them suggested innate sex differences, but most referred to the different rôles available to boys and girls in society and to the expectations of the children themselves. Some staff were of the opinion that schools and teachers reinforce the social differences between the sexes, but it was also noted that some boys as well as girls were disadvantaged and that all rural children faced limited job opportunities.

Abigail's (1982) study of 17 schools in the Wellington area found similar discrepancies between the subject choice of boys and girls and concluded that girls were cutting themselves off from many potential careers. The imbalance of boys and girls studying science in the senior school was marked, although Abigail's data suggested that between-school variables were likely to be important. At one co-educational school, for example, 33.3% of the boys in the seventh form, but none of the girls, took physics; at another, 68.8% of the boys and 71% of the girls in the seventh form took physics. Abigail found that girls often aimed for careers below their potential; they tended to be passive and conforming in classrooms; they tended not to be encouraged by their parents to look at unconventional careers, and they were deterred in many cases from this by school personnel.

A major study of girls and science education was published in Great Britain by Kelly (1981). This concluded that the under-representation of women and girls was to be explained by social rather than genetic factors. Summarizing her findings in 1982, Kelly identified three major reasons why girls dropped the physical sciences: first, their lack of confidence in taking what they felt to be a difficult subject; second, the masculine image of the physical sciences; third, the apparent remoteness of girls' everyday concerns.

Kelly argued that even if genetic factors were involved, they could not entirely explain the low participation by girls in science. She pointed to the fact that boys' inferior reading skills did not result in them being allowed to drop out of reading classes, and also noted that in other European countries large numbers of women studied science successfully. Kelly claimed that girls' major problem was lack of confidence, a point also made by Ormerod (1975) who claimed that both boys and girls found science difficult, but noted that boys were more prepared to take it for its career potential while girls preferred to take subjects they felt would be easier.

1.9 Parental influences.

The rôle of parents has already been mentioned in connection with variables related to socio-economic status or class (Jackson and Marsden, 1962; Kahl, 1961); other studies have looked specifically at parental attitudes and influences. Bynner (1972), for example, reported on the views of 2,694 parents as a follow up to the British survey conducted by the Plowden Committee, and found that the change from primary to secondary school was accompanied by a decline in parents' involvement in their children's education and in their contact with the school. High aspirations for their children were common among parents of all social classes, but parents with manual occupations placed less emphasis on school as a good thing in itself. Douglas's (1968) examination of parental attitudes in the same survey led him to conclude that, generally speaking, schools were failing to involve some parents in their children's education. He found that the effects of parents' own education were more marked than the effects of social class, parents with higher edication themselves being more likely to expect their children to enter the professions.

An earlier study by Meyer (1961) investigating children's attitudes to science suggested that pupils' appraisals of parental attitudes, rather than parents' stated views, were important; a more recent New Zealand study by Stead (1982) has endorsed this view by examining children's perceptions of their parents' attitudes within the framework of personal construct theory. Other studies have examined parental attitudes and influences in wider contexts, using an ethnographic approach. Of these, the studies by Woods (1979) and Ball (1981) will be examined in some detail later in this review.

1.10 The sociology of knowledge.

Since choice of school subject must undoubtedly be linked in some way with perceived content of that subject, it is important to mention the growth and development of research into the sociology of knowledge during the 1960's and 1970's. In particular, a collection of papers edited by Young (1971) under the title Knowledge and Control gave prominence to ideas concerning the way knowledge itself is packaged and presented. Young pointed out that previous studies had assumed the criteria of educational success, as defined by the curriculum, to be givens and had not questioned how they had been legitimized. What Bernstein termed the classification and framing of knowledge was highlighted as a significant variable in the educational context. Keddie, in the same volume, noted the importance of pupil motivation in acceptance of the academic curriculum presented to top stream classes. She defined ability as a combination of motivation and I.Q., both of which, she argued, were largely determined by social class. These papers and others led the way towards an examination of the content of individual subjects and the discovery that in some subjects there was a demonstrable bias towards particular groups of pupils. Mathematics and science were, for example, seen to meet the needs of boys rather than girls (Kelly, 1982; Fennema, 1980; Tobias, 1978), and music to meet the needs of academic élites while ignoring the 'popular' tastes of the majority (Vulliamy, 1977).

In a consideration of subject content, Whitty (1977) has emphasized the fact that, in Britain, teachers in secondary schools see themselves as teachers of subjects rather than as teachers of children, and he quotes Warwick as saying that an important aspect of a teacher's identity within a school is the subject taught and that teachers see 'putting over the subject matter' as more important than a consideration of pupils' needs. This latter point has already been mentioned in connection with the study by Reid et al. (1974).

1.11 Fluctuations in subject demand.

Where pupils are offered a choice of subjects, the numbers of pupils taking any given subject may vary from year to year. This phenomenon is known as fluctuation in subject demand, and it has become more apparent with the raising of school leaving ages and the opening up of optional curricula, together with the relaxation of

requirements for university entry, in a number of countries. Subject biases such as those discussed in the previous section have also been cited as contributing factors. Anick and Carpenter (1981) emphasised the view that in some subject areas, particular sections of the school population were disadvantaged. In discussing the findings of a United States National Survey, they found that seventeen-year-old blacks had significantly less background than the national average in all areas of mathematics, despite the fact that they said they liked mathematics, thought it the most important school subject, wanted to do well, were willing to work hard and wanted to do more mathematics. Using data from the same survey, Fennema (1981) found that girls had significantly less mathematics schooling than boys.

Pupils' drop-out rate in mathematics has been attributed to a shortage of qualified teachers. Williams (1981) has claimed, for example, that at the time of writing only 55% of North Carolina's mathematics teachers were certificated in that subject, and Schwartzmann (1981) argued that potential teachers of high school mathematics were put off by declining standards and uninterested, hostile and disruptive pupils. In accounting for the under-representation of girls in mathematics classes, Tobias (1978) noted that Ernest (1974) had found that boys as well as girls had trouble doing maths and most did not like the subject very much, but boys persevered because they felt their careers depended on it and they had more confidence than girls in their ability to learn it. This argument parallels that used by Ormerod (1975) in accounting for the low participation of girls in science.

Pheasant (1961) was particularly concerned with school influences on pupils' choice of science careers. He interviewed pupils at 18 British schools about the sixth form subjects they intended to take and found a 'startling diversity' among schools. Boys' schools generally made physics and chemistry available to all pupils up to 'O' Level, but girls' schools severely limited the numbers in physics and chemistry up to the age of 14 despite the fact that girls' modal age of career choice was 15-16 years. In this study, all the girls and 85% of the boys said they had dropped subjects not attractively presented as soon as compulsion ceased. Among all of the pupils surveyed the largest single reason given for disliking a subject was unsatisfactory pupil-teacher relations.

Pheasant found that many girls were reluctant to undertake the long training leading to a degree, or their parents were unwilling to keep them at school. He also noted that in most cases the influence of the home was greater than the influence of the school in career choice, and that the children of less educated parents had the greatest freedom of choice. Other research, reviewed by Ormerod and Duckworth (1975), has concluded that girls showed less interest than boys in science because they preferred auditory to visual learning modes (Watson, 1969); they were less scientifically curious than boys (Richardson, 1971); they saw science as impersonal (Pheasant, 1961); they felt science was a male preserve (Slee, 1968); they were required to use inappropriate strategies (Cropley, 1969); and they were more influenced by the teacher (McCreath, 1970). These conclusions, however, ignored the question of how such attitudes might arise.

In considering the decline of chemistry as a senior school subject in New Zealand, Burns (1981) noted that although the mathematical nature of chemistry is often blamed for its unpopularity, the popularity of mathematics itself has continued to rise steeply in New Zealand. Burns found that chemistry had suffered a greater decline in popularity among boys than among girls in this country, and suggested that the theory-oriented prescriptions of the late sixties could be a contributing factor. Burns also found that between 1976 and 1980 chemistry questions on the School Certificate examination paper presented a higher level of difficulty to candidates than did physics or biology questions.

Without doubt, the content and perceived relevance of examination subjects are both very important considerations for potential examination candidates, however, many researchers fail to take account of the competition provided by an increasing range of subjects offered at senior levels. In an analysis of 'A' Level passes over a twelve-year period in Britain, Duckworth (1978) noted a marked swing in the mid-sixties towards arts subjects (economics, English literature, art and geography) and also towards non-traditional sciences and the newly introduced social sciences. In the same period there was a big swing away from Latin, which was no longer required for an arts degree, and also a strong movement away from French and German.

A decline in foreign languages has also been evident in the United States and New Zealand. A survey administered by Klayman (1978) to 650 foreign language teachers, counsellors and administrators in American secondary schools asked respondents to give reasons for the decline of foreign languages. The survey identified the following reasons (in order of importance): colleges no longer required foreign languages as pre-requisites for admission; students felt foreign languages to be irrelevant; colleges no longer required foreign languages for degree programmes; there was a lack of information with respect to the value of foreign languages; and economic retrenchment.

In New Zealand, as in Britain and the United States, the study of languages has been a traditional requirement in the education of the able child, and it has already been noted that 100% of the pupils questioned by Bunce (1970) had studied at least one language in form three. Even today, some New Zealand schools have continued this compulsion in conjunction with ability streaming. Nevertheless, the Education Department's Baseline Survey (1981) showed that by 1975 French was studied by only one in six of the New Zealand secondary school population, Maori by one in 46, and Japanese by one in 186. The study of languages increased with the urbanization of the school and sex differences were such that, by form six, four times as many girls as boys studied French and German and three times as many girls studied Japanese.

In a study of nine schools in the south of England, Edwards (1980) found that boys generally showed poor achievement in modern languages and noted that 27% of boys permitted to drop languages, did so, indicating that even able boys were reluctant to learn languages. The large number of girls studying languages has been explained in terms of girls' supposedly superior verbal abilities, but Spender (1980) has noted, cynically, that in the days when access to higher education and lucrative careers was defined by language ability, boys by far outnumbered girls. Reluctance on the part of boys to study languages has been linked to the disappearance of language pre-requisites for higher education (Girouard, 1980; Klayman, 1979) and to the growth of job opportunities in the fields of science and technology (Bunce, 1970).

1.12 School variables.

A number of researchers into the various aspects of subject choice have noted between-school variables (Brown and Fitzpatrick, 1983; Abigail, 1982; Reid et al., 1974; Bunce, 1970). Such things as the type of school (single-sex, co-educational, state or independent), location (rural or urban), school clientèle (ability level, socio-economic status, ethnic origin, sex), school organization (streamed or unstreamed) and structure of the timetable, have all been seen to have some bearing on pupils' subject choice and ultimate occupational choice. Some of these variables have already been discussed in this review under other headings, but others should be mentioned.

Schmidt (1983), in the United States, put forward the argument that subject competence was directly related to the hours timetabled for pupils' exposure to the subject. He found that in a study of schools of various types, using data from the 1972 National Longitudinal Study, schools with large numbers of ethnic minority and low income students were timetabled for 5% more hours of English than other high schools, which in turn offered their students 27% more exposure to foreign languages. Student exposure to foreign languages was also found to relate to school size, students at large high schools being exposed to 33% more foreign language time than students at smaller high schools.

Ormerod (1975) noted that a larger percentage of girls attending single-sex schools, as opposed to girls attending co-educational schools, chose to take physical sciences in the senior classes. However, Smithers and Collings (1982) suggested that school type may not be significant when other variables are taken into account. In a study which identified the subject choices of some 2,000 pupils at 20 British schools, these researchers found that single-sex and co-educational schools showed differences in the levels of ability and social class of their students, the more able and higher class students being more likely to attend single-sex schools. Smithers and Collings therefore argued that the greater liklihood of girls taking science at single-sex schools was explained by the higher average ability of girls at such schools.

Rauta and Hunt (1972), however, noted differences in the

aspirations of girls attending different types of schools. In a study of over 2,000 British fifth form girls which compared the attitudes of girls of high, average and low ability, they noted that less able girls in grammar schools aimed higher than their ability warrented, and concluded that at all levels of ability school background contributed to girls' aspirations.

1.13 Case studies.

In the foregoing review, factors that may affect pupils' subject choice have been identified and discussed under discrete headings. It is obvious, however, that the many and varied factors interact in quite complex ways in the context of of particular schools and individual pupils. A number of researchers have for this reason chosen to examine subject choice in the wider setting of a case study undertaken in one or more schools as part of a more comprehensive study of school variables, particularly those serving to differentiate between pupils. Perhaps the most important of these studies has been Woods' (1976; 1979) study of a British secondary modern school identified as 'Lowfield'.

Woods noted that the key concepts of his theoretical standpoint were those relating to group perspectives, social class and institutional channelling, and he defined the four crucial criteria governing the rhetoric of subject choice as being: the prevailing custom allowing choice; the prevailing state of knowledge and current patterns of educational career (largely dictated by the examination system, the requirements of further education and employers, and the disposition of pupils: the type of child (in this case, not selected for grammar school at 11 plus); and resources such as staff, space and equipment. Thus Woods was careful to view the findings of his study in their particular geographical and historical context.

From his interviews with pupils about their subject choice, Woods was able to identify two major factors governing choice. These were affective (like or dislike of the subject) and utilitarian (career potential and pupil ability). Streaming was identified as the major cause of polarization of pupils into pro- and anti-school factions and was reflected in reasons given for subject choice. For example, although pupils from all classes chose subjects they liked,

3A tended to like subjects for official, supportive, traditional educational reasons, while 3C's reasons for liking revealed a counter-cultural group perspective where subjects were preferred for their small demands and the opportunities they afforded to 'muck about'. Woods also noted that the number of reasons given for subject choice tended to decrease by stream, and that for 3C pupils, subject choice frequently meant no choice at all, since those who chose non-examination subjects tended to see themselves as 'no good at anything'.

Parental influence was found to cover the full range from compulsion, through strong guidance, mutual resolution and reassurance to little or no influence. Woods found that generally the middle class child was more strongly counselled by parents, and that middle class parents were more likely to be involved in school processes, to show more complex reasoning in accordance with school criteria in advising their children, and to be more persuaded by 'school' factors. Generally they were well-informed, critical and coercive, instrumentally oriented and status conscious. In contrast, Woods found that working class parents were more likely to be influenced by personal factors, tended to give their children less guidance and also tended to be uninformed. He concluded that many working class parents:

> ... have little idea either of their own child's achievements and capabilities or of the career prospects and how they are associated with educational routes.
> (Woods, 1979, p59)

Woods found that 44% of the pupils he interviewed were required by the school to make changes to the subjects they had initially selected. Twice as many boys as girls were involved in subject change, and the main reason given was lack of ability. Woods claimed that this prevented boys from taking the few subjects that interested them, and concluded that teachers did most of the choosing. Hence the title of Woods' (1976) paper "The Myth of Subject Choice".

The 1981 study by Ball of 'Beachside', a comprehensive school in the south of England, was unique in that it was able to span a period of transition within the school from banding to mixed-ability classes. The researcher was interested in finding out whether the abolition of banding would herald a more egalitarian form of education at the school. However, even at the outset of his study, Ball suspected

that the organizational changes to mixed-ability classes would prove to be an egalitarian myth. Ball found, in fact, that supposedly free option choice had little impact on the fifth formers who had been constrained by the dictates of the option system and of banding in previous years. Pupils who had previously been in band two or band three found that they did not have the necessary background to choose 'O' Level courses because the content covered in these bands had been covered more slowly or was different from the content covered in band one. Even where pupils in band two had scored more than 50% in a common end-of-year examination, Ball found that teachers did not encourage them to aim for 'O' Levels rather than the less demanding C.S.E. examination. It was noted, moreover, that the headmaster had spoken to staff about the low pass rates in some subjects and had directed heads of departments not to enter candidates for 'O' Level examinations unless they were considered likely to pass. School prestige, rather than the wishes of individual pupils, was thus deemed to be the more important consideration. School policy inevitably resulted in the steering of lower band pupils towards the more practical subjects when they expressed an interest in the academic subjects, while the reverse was true in the case of band one pupils.

Ball found that the 'vast majority' of fifth form leavers gained employment in the local area, and that certain basic or traditionally high-status subjects carried more weight than non-academic subjects with prospective employers. Thus, even at the lowest level of the job market, band three pupils were less successful than band two pupils in obtaining the jobs for which they were supposedly most suited.

1.14 Compulsion versus choice of subjects.

The possibility of state intervention in determining what should be studied in schools has been mentioned in section 1.11 of this review. In section 1.6 it was noted that individual schools may formulate their own rules about which subjects should be compulsory for their pupils and may also nominate the subjects deemed to be suitable as options for high, average and low ability pupils. A British study of 25 large comprehensive schools spread over 18 Local Education Authorities conducted by Morgan (1980) found wide variation in curricula. In some schools certain subjects (such as French and commerce, chemistry and physics) were mutually exclusive; one school

prescribed music for all pupils; another forbade three sciences. A minority of schools followed Newsom recommendations for a balanced course across disciplines, but a majority stressed individual choice and made every effort to enable pupils to take any combination of subjects. Differences between schools under the same Local Education Authority were as great as differences between schools under different Local Education Authorities, and English and mathematics were found to be the only common subjects in all 25 schools out of a total of 70 subjects taught.

It has been argued (Edwards, 1980) that compulsion should be used to safeguard areas of knowledge deemed to be of national importance. However, a British Government 'green paper' on education published in 1977, according to Deem (1978), recognised the advantages of establishing a core curriculum but rejected compulsion. It suggested that maths, science and English should be on all school timetables, but it did not mention other subjects. In contrast, New Zealand secondary schools have had a compulsory core in forms three and four since the implementation of the Thomas Report in 1945. The core consists of a specified allocation of time to English, science, mathematics, social studies and physical education, together with a smaller amount of music and/or art and craft. At present, the only compulsory subject at fifth and sixth form levels is English, and seventh formers are free to choose all their subjects, except where internal school regulations prevent this. At the time of writing, certain revisions to the core proposed under the 1984 Core Curriculum Review are under discussion. Major changes could include the addition of home economics and/or technical crafts to the third and fourth form core. In addition, the Review proposed that all subjects would acknowledge 'taha Maori' by adding a Maori dimension to their content.

The existence of a compulsory core naturally limits pupils' choice of additional subjects but may enable them to choose from a wider range of subjects once the compulsion has ceased. However, it is possible that popular views about the value of certain school subjects may influence pupils' choices to a degree approaching compulsion and may, for example, account for the sex differences in subject choice noted by Ryrie et al. (1979), Ormerod, (1975), and many other researchers.

1.15 Summary and conclusions.

The issue of subject choice is one that has received wide attention from researchers in a number of fields. Figure 2, p35, summarizes some of the research falling into the ten major areas of interest discussed in the foregoing sections, and there follows below a brief summary of the variables which research to date has found to have some influence on children's subject choice. These range from those variables specific to the psychological make-up of the individual, through group norms and school variables to the wider controls and constraints exercised by the state:

INDIVIDUAL -
- occupational expectations/aspirations
- personal attributes
- subject liking
- perceived relevance of the subject
- teacher liking
- group affiliation
- parental attitudes
- home background

GROUP -
- age/form level
- sex
- ethnicity
- ability level (stream/band)
- socio-economic status

SCHOOL -
- expectations of teachers and counsellors
- guidance system
- streaming/banding
- course allocation versus selection
- timetable structure

STATE -
- pre-requisites for higher education
- examination system
- designated core curriculum
- legal school leaving age

Nevertheless, despite the wide scope of research into subject choice evidenced in this review, the present researcher was convinced of the need for further investigation.

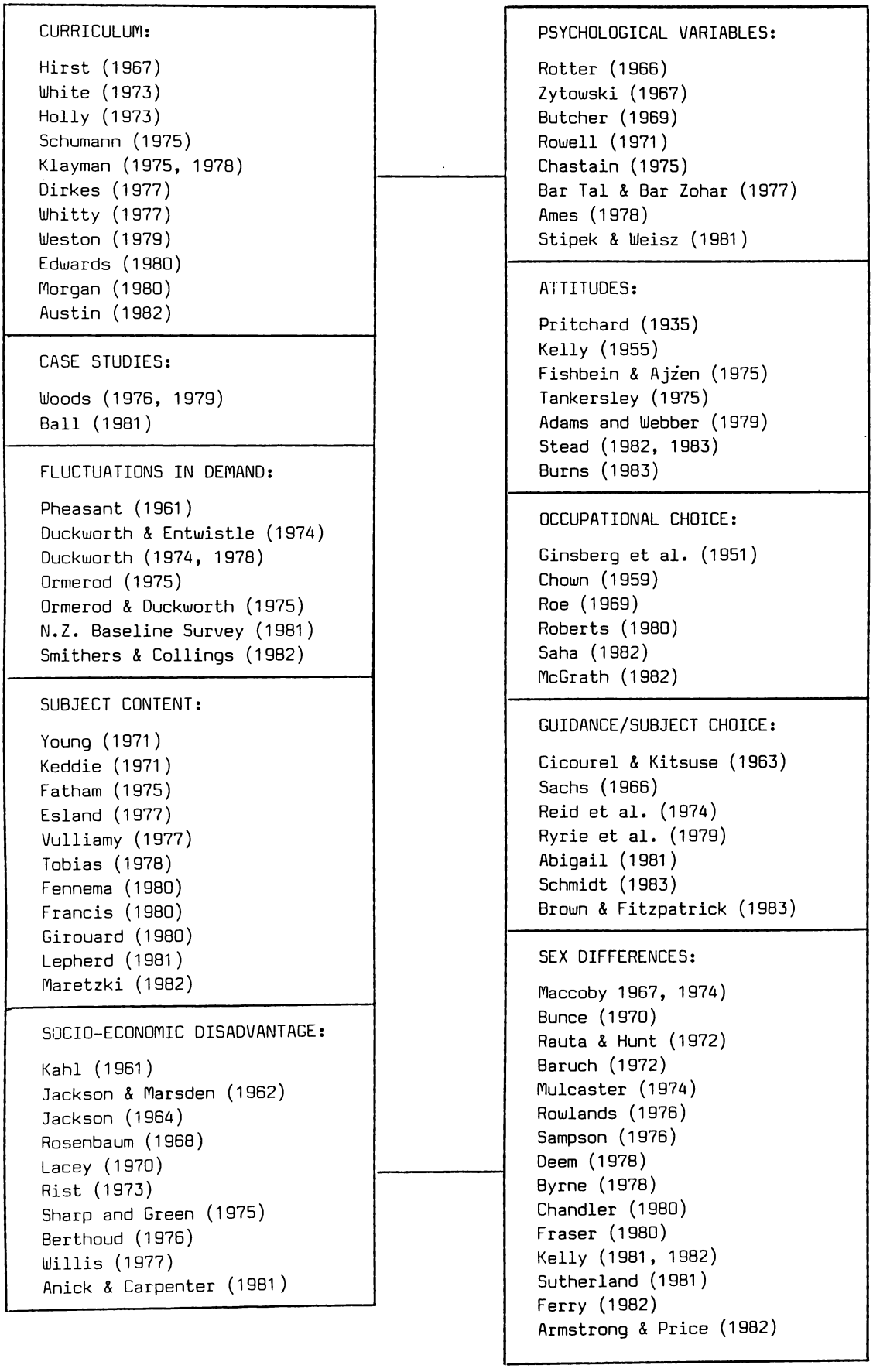


Fig. 2 RESEARCH AREAS RELATING TO SUBJECT CHOICE

1.16 A rationale for further research.

The present study was undertaken for four main reasons. First, the researcher felt strongly that factors specific to particular systems of education and to particular types of school organization were likely to be important, yet very little had been done in the New Zealand context. The only comprehensive study made in this country (Bunce, 1970) is now out of date due to changes in both the state examination system and the internal organization of schools. Bunce surveyed (by questionnaire) pupils who were all products of top-stream classes following academic curricula and thus were not typical of present day sixth formers. Other more recent New Zealand studies (McGrath, 1982; Abigail, 1982) have focused on teacher, rather than pupil perceptions, and on the perceived sex-appropriateness of subjects rather than on wider issues. It was therefore felt that there was a need for a comprehensive study which would be able to consider the extent of pupils' real freedom to choose at a time when they are no longer formally excluded by schools from certain subjects on the grounds of sex or academic ability.

Secondly, the researcher was aware that the majority of studies in the past have analysed data gathered retrospectively and felt that such studies ran the risk of contamination through pupils' rationalizations after the event. In choosing to survey pupils while they were actually engaged in making decisions regarding their subject choice, the researcher felt that a more accurate picture might well be obtained, and this could be compared with pupils' responses at a later date when they had experienced their chosen subjects.

Thirdly, the present researcher felt that despite the findings of sociologists concerned with the content and form of bodies of subject knowledge, investigations into subject choice while acknowledging pupil variables have overlooked the differences between subjects other than the broad categorization 'examination' as opposed to 'non-examination'.

Finally, though previous research has hinted that access to information is a crucial factor in the process of subject choice and this had been possitively correlated with high socio-economic status (Jackson and Marsden, 1962; Kahl, 1961), it has not been examined in detail. The present researcher was interested in finding out what

formal and informal channels of information were open to pupils, and why some pupils appeared to be more aware of the options available to them and of the implications of their choice.

In summary, having examined much of the literature relating to subject choice, the present researcher was interested in finding out how far overseas findings held true for New Zealand, and also in examining some of the variables not yet investigated. A decision was therefore made to conduct a small pilot study in order to ascertain the feasibility and possible value of further research.

CHAPTER TWO

EXPLORATORY PHASE

OVERVIEW: The pilot study is outlined, the major research questions are formulated. and consideration is given to the research methodology and its theoretical underpinning.

2.1 The pilot study.

It became apparent that a pilot study would (a) help the researcher define more precisely the central questions that should be addressed in the main study, (b) develop and evaluate data gathering techniques and (c) suggest an over-all design for the main study. Details of the pilot study and its outcomes are now presented.

The pilot study was undertaken in mid-1982 at an urban high school for girls. This school was chosen mainly because the newly-appointed principal was very concerned about the restrictions imposed on pupils by the option system she had inherited and had already begun to plan major changes for the following year. Thus it was thought that the pilot study might provide some useful feedback to the school relating to pupil and staff opinions of the old system and their expectations of the new one. In turn, the pilot study was expected to benefit from pupils' and teachers' interest in the forth-coming changes to their system.

The specific aims of the study were as follows:

1. to test the reactions of selected pupils and staff to issues raised in the research literature and to seek confirmation of the validity of such issues;

2. to find evidence of relevant issues not investigated in previous research;

3. to suggest questions that should be asked in the main study;

4. to consider the merits or interviews, as opposed to questionnaires as a major research tool;

5. to give the researcher an opportunity to practise the kinds of interview techniques needed to avoid observer bias.

6. to investigate ways of analysing data for the main study;

7. to suggest a suitable design for the main research.

It was not thought that the findings of the pilot study would necessarily be predictive of the situation in the co-educational school or schools to be selected for the main study for a number of reasons. The pilot study school was a single-sex school with a predominantly female staff. In 1982 it was still a rigidly streamed school, with pupils' placement in classes being related to their academic ability assessed on entry to the school in form three, and the option system was closely related to this streaming. French was then a compulsory subject for all high ability pupils, and German and Latin were offered as options only to high ability pupils. Music was also an option regarded as suitable only for academic pupils, while commercial subjects (shorthand, typing and consumer studies) were offered only to pupils of average or below average ability. The options did not include a number of subjects normally available at co-educational schools (woodwork, metalwork, engineering shopwork and technical drawing), although plans were being made to include these options in the future and also to introduce an innovative course in computer awareness at fourth form level.

At the outset of the pilot study it was thought likely that the main study would be conducted in one or more co-educational schools in the same urban area. It was known that these schools had less rigid systems of streaming, or had mixed-ability classes. Their option systems were also more open. Thus it was likely that the pilot study school would differ from the main study school or schools in the following ways:

its rigid option system would channel a greater proportion of pupils towards subjects they would prefer not to take;

the range of subject choice would be limited since woodwork, metalwork, engineering shopwork and technical drawing were not offered to the girls;

greater differences would be apparent between the options chosen by pupils identified as 'high ability' and 'low ability' because they were required to choose from differing option lists.

Despite these anticipated differences, two major outcomes were expected of the study. It was thought that a wide range of responses would be encountered, because both pupils and staff would be able to compare their experiences of the old restrictive option system with their expectations of the new open system. It was also felt that interest already generated in the school would enable to researcher to converse freely in an unstructured interview and thus be able to initiate interview topics and try out techniques that might prove suitable for the main study.

2.1.1. The pilot study sample.

With the assistance of the Acting Deputy Principal and the co-operation of classroom teachers, 14 girls (three from each of four classes and two from a fifth class) were selected for interview. The girls were identified by their teachers as being from high, average and low ability third forms and from high and average ability fourth forms. (See Figure 3 below.)

INTERVIEW	INTERVIEW PARTICIPANTS		
1	3 girls	HIGH ABILITY	FORM THREE
2	3 girls	AVERAGE ABILITY	FORM THREE
3	3 girls	LOW ABILITY	FORM THREE
4	3 girls	HIGH ABILITY	FORM FOUR
5	2 girls	AVERAGE ABILITY	FORM FOUR
6	Teacher of music		
7	Teacher of French and German		
8	Teacher of commercial subjects		

Fig. 3 THE PILOT STUDY INTERVIEWS

Interviews with pupils suggested that three subject areas were of particular concern to them under the existing option system: music, languages and commercial subjects. After all the pupils had been interviewed, therefore, the researcher spoke to teachers of these subjects. Interviews with pupils and with teachers were each of forty minutes duration and were largely unstructured. However, teachers were specifically asked to comment on concerns previously mentioned by the girls.

All interviews were conducted by the researcher and the pupils from each form class were interviewed together. At this stage it was felt that the girls would feel more comfortable in a group with their friends, and that unstructured interviews with several participants would yield more information relating to subject choice than the semi-structured one-to-one interviews that were later used in the main study. The obvious disadvantage of the group interview was the possibility of undue group consensus, but this was felt to be outweighed by the advantages at this purely exploratory stage of the research. All interviews were recorded on tape and later transcribed.

2.1.2 Analysis of the pilot study transcripts.

Analysis of the transcripts revealed evidence of some concerns noted in previous research on subject choice, but also suggested potentially important issues not previously examined. Several areas worthy of further study were identified, and decisions concerning the method and design of the main study were made as a result of findings of the pilot study.

2.1.3 Decisions about the main research.

Issues raised in the pilot study pointed to a need to take account of school option systems and the internal regulations governing them. Ideally, two or more schools with differing option structures should be compared in the main study.

Results of the pilot study also confirmed a decision to focus on pupils' views, in particular on their categorizations of individual school subjects, since it was found that pupils used a wide range range of personally-constructed subject categorizations

which varied according to the subject under consideration.

The issue of pupils' access to information was also raised in the pilot study. It was found that some pupils knew much more than others about the subjects offered and were able to make well considered decisions; some pupils had little understanding of what to expect of the different subjects, and in at least one case, had exercised no choice at all. It was therefore hoped that the main study would be able to uncover some of the factors that enhanced pupils' access to information, and it was felt that one-to-one interviews would be appropriate.

It was decided that the main study would also include some interviews with parents. Interviews with children in the pilot study suggested that parents' attitudes to the optional subjects strongly affected children's attitudes even where the children claimed to have made choices by themselves.

Interviews with teachers would also be included in the main study, since interviews with teachers in the pilot study had shown a degree of mismatch between pupils' and teachers' views of the subjects which could have implications for pupil choice.

2.1.4 Decisions about method and design.

The richness of data gathered in the pilot study left no doubt that new insights into the problems of subject choice could be obtained only by in-depth interviews. The group interviews with pupils in the pilot study had fulfilled their function of generating ideas and familiarizing the researcher with interview techniques, but it was decided that to eliminate the possibility of group consensus, one-to-one interviews would be conducted in the main study.

It was decided that the main research would begin at form two level. This was because the pilot study showed that major decisions regarding secondary school subject choice are made at or near the time of pupils' enrolment, which generally takes place towards the end of their form two year.

The emphasis of the main study would be on choices made by

pupils entering secondary school, but it would also look at some pupils deciding on their fifth form subjects. This decision was made because there was some evidence in the pilot study that younger pupils felt more positively about a wider range of subjects than did older pupils, and it was felt that possible differences due to age and/or experience should be investigated.

2.2 The research questions.

Following the literature review and as a result of issues raised in the pilot study, six major research questions were formulated. These were as follows.

Q1 **HOW DOES THE SCHOOL MEDIATE PUPILS' CHOICES?**

British studies have been particularly concerned with the system of grading pupils at eleven plus that has opened up or limited their educational opportunities. Even where a comprehensive system has been introduced in Great Britain, ability streaming frequently persists and resultant labelling is claimed to accentuate differences between academic and non-academic pupils (Lacey, 1970; Jackson and Marsden, 1962).

Woods (1979) found that teachers were important mediators of pupil choice operating within a framework of institutional channelling, and Ball (1981) noted that administrative expediency and teachers' perceptions of pupils' ability, behaviour and motivation were crucial to the negotiation of pupils' choices. The American 'Lakeshore High School' study by Cicourel and Kitsuse (1963) also found that school personnel were strongly influenced by subjective estimations of pupils' abilities based on their family background.

In New Zealand, the so-called 'classless society', and particularly in a non-streamed school, can teachers or administrators be seen to mediate pupils' choices? It is important to ask this question in a study of pupils' subject choice so that the extent of

pupils' real freedom to choose can be judged, at least in the limited context of the study.

Q2 HOW DO PUPILS GATHER INFORMATION ABOUT THE OPTIONAL SUBJECTS?

Previous research has considered the influence of parents on children choosing optional subjects (Woods, 1979; Jackson, 1964; Cicourel and Kitsuse, 1963). Other studies have investigated the influence of peers (Ryrie et al., 1979; Bunce, 1970). The pilot study for the present research suggested, however, that information gathering may be a complex process in which a chain of formal and informal contacts may play some part. In addition to parents and teachers, pupils mentioned older siblings, friends in and out of school, relations and next-door neighbours as sources of information about school subjects.

Q3 WHAT CRITERIA DO PUPILS USE TO DIFFERENTIATE BETWEEN SUBJECTS?

Woods (1979) found that pupils' subject choice was influenced by two main factors in approximately equal proportions. These were affective (liking or disliking the subject) and utilitarian (seeing career potential or having ability in the subject). In the like/dislike response Woods noted the influence of the teacher, especially for girls in lower ability streams for whom teacher-liking seemed to be particularly important. Woods gained his information through interviews in which he asked pupils their reasons for choices. He did not focus on subjects not chosen, although some of his informants explained that they made their 'choices' for negative reasons, such as not being any good at the other subjects.

Pritchard's early study of subject preference (1935) focused

only on academic pupils who made written responses to his questions. Pritchard found that interest and ability were the major reasons given for liking a subject, but he also found that pupils tended to view individual subjects in different ways, that there were differences in responses made by girls and boys, and that there appeared to be age-related differences in subject preference.

It seems very likely that there are age, sex and personality variables associated with children's subject choice, and possibly also a cultural factor (noted by Ball, 1981; Woods, 1979; Willis, 1977). The major limitations of previous studies, however, have been due to a lack of attention paid to reasons given by pupils for their rejection of certain subjects, as opposed to their choice of others, and also a failure to appreciate that pupils may apply different categorizations to different subjects. This latter point, suggested by Pritchard's research, was strongly indicated in the pilot study for the present investigation, and findings led to the present researcher's decision to ask pupils to comment on all the subjects offered to them and not just the ones they thought they would take.

Q4 | WHAT CRITERIA DO PUPILS USE TO CHOOSE THEIR SUBJECTS?

Although liking a subject has been identified as a major reason for choosing a subject, it was clear from the pilot study that pupils did not always choose the subjects they claimed to like most, and sometimes did not like the subjects they chose.

The criteria pupils use in choosing their optional subjects may well be related to specific factors such as school organization, pre-requisites for higher education, opportunities for future employment, current ideology concerning the functions of schooling, as well as personal preferences and parental pressures. The present researcher felt that such criteria would be likely to change in response to changes in such variables and was interested in identifying those criteria used by pupils in the localized context of the present research.

Q5 | ARE PUPILS SATISFIED WITH THEIR DECISIONS AFTER CHOICE?

Previous studies have not dealt specifically with pupils' satisfaction, or otherwise, after choice. However, the present researcher felt that a concurrent study following the decision making process would allow a comparison to be made between pupils' expectations on choosing with their comments about subjects after experiencing them. Such a study would also be able to monitor option changes made by pupils or by the school.

Q6 | HOW DO THE ATTITUDES AND EXPERIENCES OF PUPILS DIFFER?

Much of the research into subject choice has, until recently, been concerned with the identification of group norms, thereby highlighting the disadvantages experienced by certain groups such as the working class (Jackson and Marsden, 1962), ethnic minorities (Anick and Carpenter, 1981) and girls (Kelly, 1981). However, it is reasonable to assume that not every member of a disadvantaged group is necessarily disadvantaged. An analysis of individual cases could therefore help the researcher to identify specific variables contributing to a pupil's problems at school and also those likely to have contributed to a pupil's success in an educational context despite being a member of a disadvantaged group.

Q7 | HOW DO PARENTS VIEW CHILDREN'S SUBJECT CHOICE?

Other studies have noted the range of influence exercised by parents on their children's schooling (Woods, 1979; Douglas et al., 1968), and the pilot study for the present research suggested that pupils frequently reflect the attitudes and expectations of their

parents. In order to answer the above question the researcher would have to interview some of the children's parents. These interviews would allow the researcher to assess the degree of congruence between parents' views and their children's views about the optional subjects, and also to see how closely the parents' estimations of their child's abilities and interests match those of the child.

Q8 HOW DO TEACHERS SEE THE EFFECTS OF PUPIL CHOICE?

The wider effects of pupils' freedom to choose their school subjects are seen in the fluctuations in demand for subjects such as languages (Girouard, 1980) and Science (Duckworth, 1978). Within schools there may be other concerns, for example about class size and staffing. The present researcher was interested in finding out how New Zealand teachers view fluctuations in the demand fo their subjects and how teachers' views about the value of their subjects match the criteria used by pupils to select or reject those subjects. These are important considerations at a time of increasing agitation by curriculum planners for the introduction or extension of core curricula (Ross, 1984; Edwards, 1980; Holt, 1978).

2.3 Methodology and associated theoretical issues.

It was clear to the researcher that the particular nature of the above research questions would have implications for the methodology used and for underlying theoretical issues.

In order to assess the part played by the organization of a school option system in influencing children towards making certain choices, it would be necessary to focus on one or more schools whose systems could be examined in some detail. Although such detail could perhaps be obtained through questionnaires directed either to pupils or to school personnel, it seemed likely that a case study approach using in-depth interviews would prove more fruitful in that such an approach would allow the researcher access to data potentially much richer than that which could be obtained through

questionnaires, and would perhaps also give the researcher an opportunity to uncover unanticipated data.

The decision to undertake an ethnographic study focusing on the choices made by individuals within a given context was made with the aim of identifying concerns and behaviours appearing to conform to or conflict with group norms. There were three main reasons for choosing this type of study. First, the study of subject choice made by Woods (1979, 1976) as part of a wider case study appeared to have uncovered data that previous research had been unable to explore because of the limitations imposed by traditional research methods requiring a pre-constructed hypothesis to be tested against emergent data. Second, the researcher happened to be associated with a group of other researchers (Freyberg, Osborne et al., 1981) who had discovered that interviews about instances of scientific phenomena revealed that pupils' responses were heavily influenced by prior understandings which impeded their acceptance of scientists' views of the phenomena. These researchers, grounding their observations in generative learning theory (Osborne and Wittrock, 1981), found that the interview method revealed new insights into children's thinking and the logic they applied in particular circumstances. This had a bearing on the third reason: the fact that the process of subject choice is a decision making process likely to be influenced by the individual's predispositions and by his or her beliefs about the consequences of certain actions (Fishbein and Ajzen, 1975). It seemed probable, therefore, that pupils making decisions about their school subjects might be basing those decisions on sets of beliefs unanticipated by the researcher. These beliefs, if they existed, could be uncovered only by a phenomenological approach focusing on individuals in an interview situation and then looking for patterns of meaning in the emergent data. Thus the present researcher chose to follow a grounded theory method for which there is now growing research precedent (Battersby, 1981; Haigh, 1981).

From the above explanations it can be seen that the researcher was something of an eclectic in drawing from theory and methodology widely applied in the social sciences. Nevertheless, it is argued that the methodology, while having some limitations, was theoretically sound. A brief explanation will now be given of research precedent for the methods adapted for use in the present study, and of their theoretical bases.

2.3.1 The phenomenological approach.

Phenomenology is not itself a method, but a philosophical approach acknowledging that individuals act according to their personal understandings of perceived phenomena, and accepting that "if men define situations as real, they are real in their consequences" (Thomas, 1928, p572). Stemming from the ideas of the existential philosophers, the phenomenological perspective was advanced through the writings of Husserl and Schultz, and later translated by Garfinkel to the field of sociology. According to Bogdan and Taylor (1975), the phenomenologist "examines how the world is experienced. For him or her, the important reality is what people imagine it to be" (op. cit. p2). However, since the projected research was to investigate the understandings of individuals in a social situation, it was important that social as well as psychological factors should be considered.

The present researcher inclined towards a symbolic interactionist view which sees participants in social situations constantly in the process of interpreting their everyday world as it relates to themselves. Ramsay (1984) explains that:

> While they may have a set of preconceived explanations (especially in familiar situations such as their home or school) their interactions with others and objects depends on their ongoing interpretations as they experience the situation. Thus the symbols of the situation, the events which occur in the situation, the interaction of the people and above all, the person's interpretations of the situation are central to the symbolic interactionist position. (Ramsay, p14, 2nd Edition draft)

This view differs from the structural functionalist view in that, while it acknowledges that norms, rôles and values pertaining to the social group may impose constraints and have a bearing on outcomes, they do not determine what people will do.

2.3.2 Ethnographic methods.

The present research makes acknowledgement particularly to Garfinkel, who pioneered ethnological techniques in the social sciences and coined the term 'ethnomethodology' to describe his

phenomenological emphasis and set of ethnographic procedures used to uncover the perceived realities of participant members of groups to be studied. These procedures included the examination of personal documents such as diaries and letters, participant observation and interviews with individuals. In the present study, personal documents were not examined, although some information was gathered from school prospectuses and other materials produced by the schools. Participant observation was limited to attendance at one parent/ teacher evening, observation at one pupil's enrolment interview, and participation with one fourth form class in a general information giving session at their school and a further session relating to their possible choice of science subjects in the fifth form. A major emphasis of the research was, however, placed on the one-to-one interview, and an attempt was made to follow the advice given by Psathas (1977) to suspend belief in society as an objective reality in an attempt to view it through member's eyes. The extent to which the researcher endeavoured to do this is explained in Chapter Three (Design and Procedures).

2.3.3 The decision-making process.

A number of researchers have contributed to the writer's understanding of the decision making process involved in subject choice, in particular Ajzen and Fishbein (1969) whose decision making model is summarized in Figure 4 below.

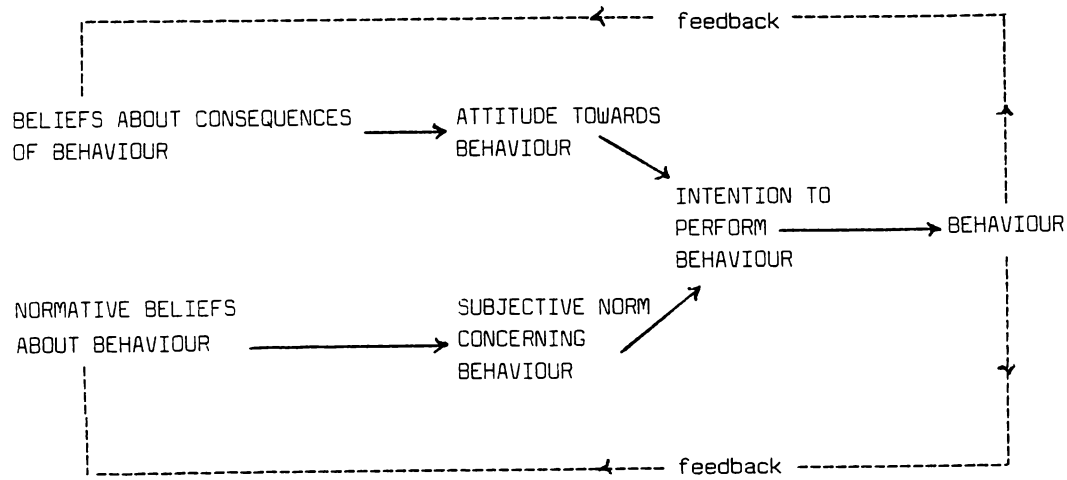


Fig. 4 A MODEL OF DECISION MAKING
(After Ajzen and Fishbein, 1969)

The Ajzen/Fishbein model proved to be a valuable starting point, although subsequently it was found to be not entirely adequate for use in the rather complex situation of subject choice, despite validity as a predictor of children's attitudes to science claimed by Stead (1982).

2.3.4 Personal construct theory.

The examination of pupils' categorizations of their school subjects in the present study also draws on Kelly's (1955) Personal Construct Theory. Kelly postulated that each one of us perceives the world in terms of a series of dichotomous, or bi-polar, constructs, which provide the basis for predictions about related events. The existence of such constructs was noted by the researcher during analysis of data for the pilot study for the present research, and identification of individual pupil's constructs subsequently proved useful in the analysis of data for the main study. Kelly's constructs are wholly compatible with the phenomenological perspective, but they present the ethnographer with the challenge of interpretation. In the present study, for example, a school subject described as 'hard' by some pupils was regarded as having the negative aspect of difficulty, while for others the concept of 'hard' indicated a pleasurable challenge.

2.3.5 Subject content and form.

In addition to the acknowledgements made above, the present study acknowledges that the perceived content and form of school subjects contributes a further variable to the context of pupils' subject choice. Here, the ideas of Young, Keddie, and Bernstein (in Young, op. cit., 1977) are recognised, as are the contributions to this field of Esland (1977) and Whitty (1977).

2.3.6 Case study method.

The use of the case study in the social sciences has long been recognised as a valid activity. According to Stake (1978):

> A case need not be a person or enterprise. It can be whatever 'bounded system' (to use Louis Smith's term) is of interest. An institution, a program, a responsibility, a collection or a population can be the case. (Op. cit., p7)

In the field of education, case studies have tended to be studies of institutions such as 'Lakeshore High School' (Cicourel and Kitsuse, 1963) and 'Beachside Comprehensive' (Ball, 1981), often with the inclusion of detail about individual student cases. The present study is essentially a comparison of two cases, each being an option system operating within a high school, in addition the study is examining a process and includes individual pupil cases and also a subject case.

Although case studies can be used to test hypotheses and can also be useful in theory building, they are generally found most useful for expansionist rather than reductionist pursuits in that they provide a wealth of data, often of an idiosyncratic nature. Generalization should therefore be attempted with caution. In the present study no attempt is made to generalize outside the context of the cases considered. Analysis of the data is directed towards the construction of models of decision making within the contexts delineated.

2.3.7 Grounded theory.

Ethnology is concerned with description and explanation rather than with the testing of hypotheses, and is particularly suited to the application of grounded theory methods which, according to Glaser and Strauss (1967), emphasises the prior step of discovering what concepts and hypotheses are relevant for the area that one wishes to research

Grounded theory is based on the discovery of major concerns or 'categories' by constant comparison of data. Categories are defined by their properties as evident in the supporting data, and these in turn are used to form the basis of propositions, or statements with varying degrees of generalizability. Glaser and Strauss have claimed that the method can be used to generate substantive theory, though Becker (1958) saw the process of selection and definition of problems, concepts and indices, as leading to the construction of social system models.

It should be noted that the nature of the present study necessitated some departures from the methods used by other grounded theorists. Battersby (1981), for example, follows Glaser and Strauss in regarding the collection of data to be an on-going process until

'theoretical saturation' has been reached and categories can be assumed to be verified by the data. Continuous sampling of the data was not feasible in the present study because a major aim was to be the sampling of pupils' thinking at particular times during, and soon after, their decision making. On-going sampling would have been detrimental to the study, since pupils' rationalizations can be expected to change over time and in the light of experience. In the present study, therefore, grounded theory methods were used to analyse complete sets of data.

It was expected that grounded theory methods of data analysis would result in the generation of a model, or models, of decision making in the context of subject choice, and perhaps also give rise to propositions regarding the criteria seen to influence pupils' decisions. The various methods of data analysis used by the researcher in the present study were specially developed in response to the particular needs of the study. They will be explained in some detail in following chapters.

All of the above acknowledgements point to the researcher's commitment to an interactive model of subject choice which is essentially dynamic, and in which due emphasis is given to the subjective understandings of participants in the decision making process, whether they be the pupils themselves, their parents, or school personnel.

CHAPTER THREE

THE MAIN STUDY - DESIGN AND PROCEDURES

OVERVIEW: Information is given regarding the schools selected for the study, and the pupil, parent and teacher samples are described. The research design is explained and the flow of the research is outlined.

3.1 Schools selected for the main study.

It was evident from the pilot study that the first major decisions involving subject choice at present facing pupils in New Zealand schools are those relating to third form options which must be made before pupils reach secondary school. It would have been possible to interview pupils on arrival at secondary school, but the researcher was anxious to talk to pupils during the decision making process as well as after they had experienced their chosen subjects. Purely retrospective studies may be contaminated by rationalization after the event.

In order to reach pupils at the crucial decision making time it was necessary for the researcher to gain access to form two children attending country primary schools or urban intermediates. This in turn required a decision about the direction of the research. There were two possibilities. A representative sample of form two pupils could be interviewed at, say, one large intermediate school, and then followed up in their respective secondary schools. In this case, pupils could be destined for one or more of the following types of school: a girls' high school, a boys' high school, or a co-educational high school. These might be state schools, state-integrated denominational schools, or private schools. Because of the variety of pupil destinations, the number of pupils reaching each type of school who could be contacted by one researcher at the crucial times would be necessarily small. Moreover, it was anticipated that the nature of school option systems would prove an important variable and that data obtained from children destined for different secondary schools would be difficult to compare.

A second research possibility was that of first choosing a secondary school and then surveying a sample of form two pupils at

its contributing schools who had enrolled or intended to enrol at the school for the following year. This latter procedure was eventually adopted, but a decision was made to focus on two secondary schools, both of which were co-educational. This would allow the possibility of identifying common concerns of pupils choosing options and also to identify some of the factors relating to the different option systems at the schools. It was decided that a sample of pupils making the transition from form four to form five would also be interviewed.

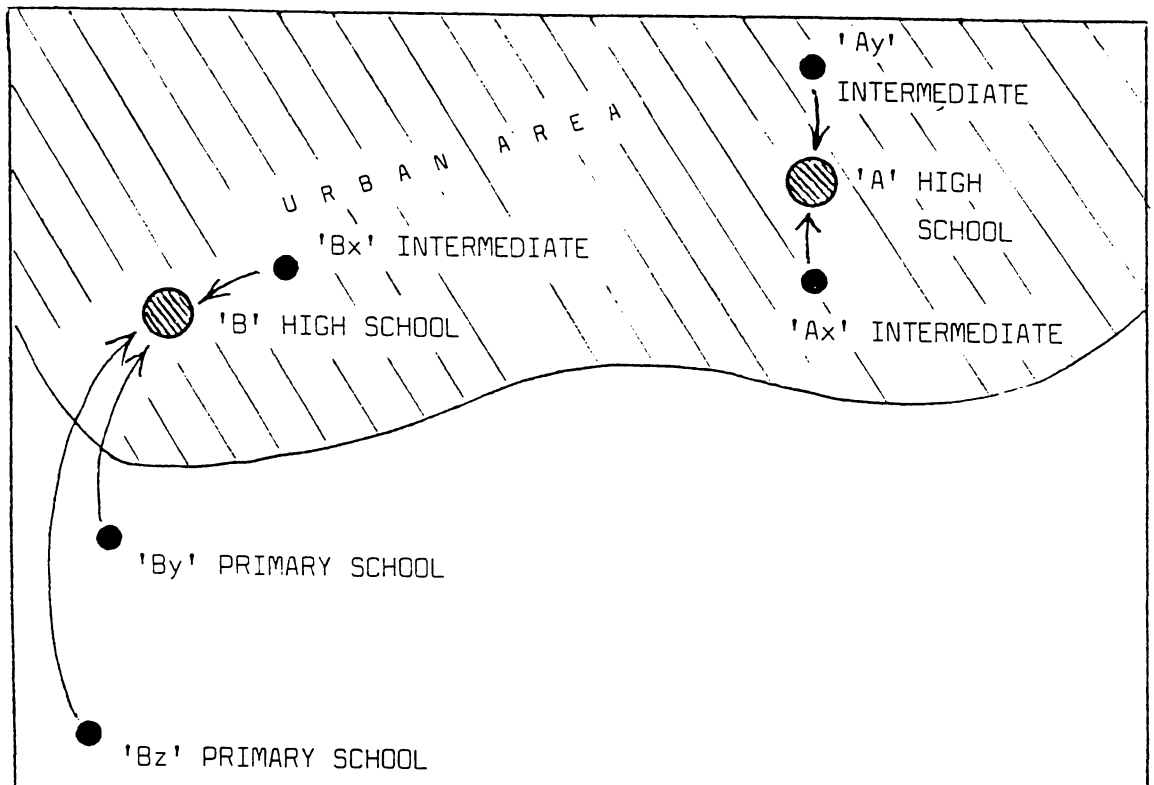
3.1.1 The secondary schools.

The two schools selected were both urban co-educational state secondary schools, serving similar adjacent and largely residential areas. (See Figure 5, p56.) Pupils attending the two schools were roughly comparable in numbers, ethnic composition and range of home background of their pupils. A minority of those attending both schools lived on farms or came from rural settlements, but most children attending, or about to enrol at 'A' High School had prior experience of urban intermediate schools, while the catchment area for 'B' High School included a number of rural primary schools.

The major differences between the two high schools were in methods of placement of pupils in classes and in the organization of the option systems. School 'A' was completely unstreamed, with the exception of maths classes, while pupils at school 'B' were streamed in their form classes for core subjects on the basis of assessments made by their form two teachers. The option structures of the two schools were significantly different and will be discussed in detail in Chapter Five.

3.1.2 The contributing schools.

A large urban intermediate school ('Ax' Intermediate) was found to be the major contributor to 'A' High School, but a second urban intermediate ('Ay') also contributed some of its form two pupils living in the 'A' High School zone. With the approval of the District Senior Inspector, the researcher therefore asked the principals of the two intermediates for permission to interview a sample of their form two pupils intending to enrol at 'A' High School. Permission was readily granted.



'Ax' INTERMEDIATE	A large urban intermediate school (forms one and two only) contributing the majority of its pupils to 'A' High School.
'Ay' INTERMEDIATE	A large urban intermediate school contributing some of its pupils to 'A' High School.
'A' HIGH SCHOOL	A large urban co-educational high school in the North Island of New Zealand. The school is attended by pupils drawn mainly from its surrounding residential area.
'Bx' INTERMEDIATE	A large urban co-educational intermediate school contributing the majority of its pupils to 'A' High School.
'By' PRIMARY	A small rural primary school contributing the majority of its pupils to 'B' High School.
'Bz' PRIMARY	A small rural primary school contributing some of its pupils to 'B' High School.
'B' HIGH SCHOOL	A large urban co-educational high school serving a residential area adjacent to that served by 'A' High School.

Fig. 5 THE RESEARCH SCHOOLS

The major contributor to 'B' High School was a large urban intermediate school ('Bx' Intermediate), but some pupils were also contributed by a number of small primary schools in the outlying rural area. Again, with the approval of the District Senior Inspector, the principal of the intermediate school and the principals of two rural primaries ('By' and 'Bz') were contacted. The researcher was given permission by the three principals to interview a sample of form two children intending to enrol at 'B' High School.

3.2 The pupils selected for the study.

Pupils selected for initial interviews at both the form two and form four levels were intended to represent the diversity of attitudes and experiences to be expected of pupils of both sexes with a range of academic ability, ethnic origins and home background. However, because personal interviews are very time consuming, the numbers of pupils interviewed at each level were necessarily small. Thus it cannot be claimed that the pupils interviewed were proportionately representative of any of these major aspects in either the contributing schools or the secondary schools.

In order to preserve the anonymity of individuals, only sex, form level and school attended have been noted in the data, together with an indication of which were Maori pupils. However, it should be mentioned that the total sample of 91 pupils included a number from single-parent families, some from re-formed families (with step-parents and step-brothers and sisters), some who were part Asian, and some who were born in Europe. In fact, they were, as intended, representative of the very diverse backgrounds to be expected of pupils in New Zealand schools. Nevertheless, these pupils had in common their attendance at particular schools in a small, relatively affluent area of the country, and the research must be viewed in the light of this fact.

3.2.1 The form two pupils destined for 'A' High School.

Twenty form two pupils were interviewed at 'Ax' Intermediate School between September 21 and October 4, 1982. They were selected by their teachers as being representative of the range of pupils at the school who were destined for 'A' High School, in

terms of ability, home background and ethnic origin. Eleven boys and nine girls were interviewed.

A further six pupils (three boys and three girls) were interviewed at 'Ay' Intermediate on October 22. These children were selected by their principal from the minority of pupils destined for 'A' High School on the basis of their residential zoning. These pupils represented a range of ability, according to the principal, but there was little variety in their family background.

3.2.2 The form two pupils destined for 'B' High School.

Sixteen form two pupils at 'Bx' Intermediate School were interviewed between September 23 and October 7, 1982. These pupils were selected by their teachers as being representative of the range of form two children destined for 'B' High School, in terms of ability, ethnic origin and home background. Eight boys and eight girls were interviewed.

Five form two pupils (two boys, three girls) were interviewed at 'By' Primary School on October 11. These children were selected by their principal from the small number of pupils destined for 'B' High School. They represented a range of ability and home background and included one Maori pupil.

Six form two pupils (three boys, three girls) were interviewed at 'Bz' Primary School on October 18. These children were selected by their principal from the small number of pupils destined for 'B' High School. They were all of European descent, but represented a range of ability and home background. It should be mentioned at this point that in each case information regarding pupils remained confidential to the respective schools. The researcher did not wish to be influenced by information provided by teachers before the interviews took place. All information given in the study was therefore provided by the interviewees themselves except in two cases where teachers provided follow-up information after all the pupil interviews and re-interviews had been completed.

3.2.3 Re-interviews in form three at the two high schools.

Twenty five of the 26 form two pupils interviewed in 1982 were

re-interviewed in the third form at 'A' High School between March 25 and March 29, 1983. The remaining pupil was tragically lost to the study following a road accident.

The 27 form two pupils destined for 'B' High School were re-interviewed in form three at 'B' High School between March 30 and April 6, 1983. Because this school operated two of its options on a half-yearly basis, pupils were asked to make a written comment on their second half-year option during September, 1983. One boy was overseas with his family at that time and was unavailable to make this comment.

3.2.4 The fourth/fifth form pupils at 'A' High School.

Eighteen fourth form pupils (nine boys, nine girls) were interviewed at 'A' High School between November 1 and November 5, 1982, when they were at the point of making their subject choices for the following year. These pupils were selected by their form teachers as being representative of the range of ability, ethnic origin and home background of pupils attending the school.

Seventeen of these pupils were re-interviewed in the fifth form between March 14 and March 18, 1983. One boy was lost to the study when he and his family left the district.

3.2.5 The fourth/fifth form pupils at 'B' High School.

Nineteen pupils (eight boys, eleven girls) were first interviewed in form four at 'B' High School between November 1 and November 5, 1982, while they were in the process of choosing their fifth form subjects for the following year. The pupils were drawn from the range of streamed classes in the school, and thus included a range of abilities. They were also selected by guidance counsellors as being representative of the range of ethnic origin and home background. Eighteen pupils were re-interviewed in the fifth form between March 1 and March 5, 1983, one girl being lost to the study as a result of transfer to another area. Figure 6, p60, summarizes the research design with a diagrammatic representation of the pupil, parent and teacher samples. Further information (including identification details) is given in Volume II, Appendix A.

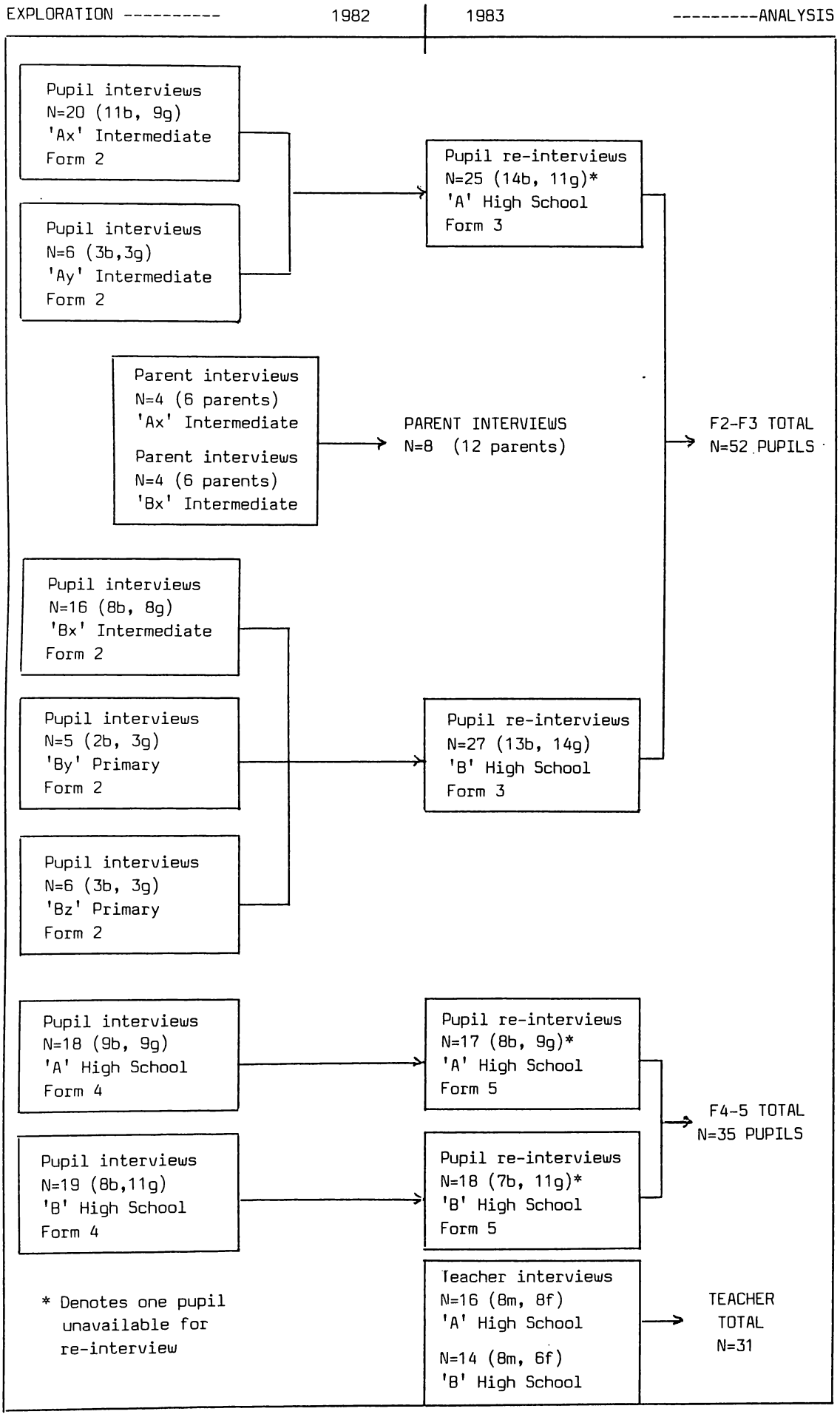


Fig. 6 SUMMARY OF THE RESEARCH DESIGN

3.2.6 A note on numbers.

It was originally envisaged that equal numbers of boys and girls would be interviewed for the study. However, all pupils were selected by their teachers and in some cases, while attempting to cover other variables, teachers lost sight of the stipulated boy/girl balance. When the imbalance was noted, no satisfactory criteria could be determined for excluding individuals from the study. In any case, both schools had unequal numbers of boys and girls on their rolls and since the study was to be ethnographic rather than experimental there seemed to be no valid reason for excluding any of the data.

3.3 The parents selected for the study.

A number of other studies have noted the importance of parents in the matter of subject choice, especially of younger pupils (Woods, 1976; Jackson, 1964; Cicourel and Kitsuse, 1963). While the present study was to be school based , therefore, it was decided that a small number of parents of form two children would be interviewed as a cross-check against the parental concerns identified by pupils.

Teachers at both 'Ax' and 'Bx' Intermediates were asked to select five pupils whose parents might be willing to be interviewed, and the children were given notes to take home. (See Appendix A, p277.) The parents were subsequently contacted by telephone and eight interviews were arranged. These were held in the parents' homes between November 17 and November 25, 1982. The remaining parents were very willing to be interviewed, but in the event were unable to find the time.

It must be noted that among the parents selected for interview there was a strong bias towards interested and supportive parents. Three of the parents mentioned having been members of School Committees and one was a member of a High School Board. All the parents were of European ancestry, and at least two sets of parents had been born overseas.

While the limitations of the parent interviews were recognized, it was nevertheless felt that they added an important dimension to the total study.

3.4 The teachers selected for the study.

Subject teachers at the two high schools were interviewed between February 16 and March 13, 1983, before the pupils were re-interviewed. One teacher (wherever possible, the head of department) was asked to comment on each subject in each school. In some cases a teacher who was in charge of two or more subjects in a school was asked to comment on each of them.

Thirty-one teachers were interviewed. These included eight male and eight female teachers at 'A' High School, and nine male and six female teachers at 'B' High School. The interviews, which all took place at the schools during teachers' non-teaching time, covered all examinable subjects offered to pupils from forms three to five at the two high schools.

3.5 Interview Techniques.

Since the findings of the present study have been arrived at inductively, largely through analysis of the interview data, it is appropriate to spend some time describing the interview procedures. Critics of ethnographic research maintain that the manner in which interviews are conducted and the actual words used by the interviewer may produce a certain amount of bias which affects research findings. It is important, therefore, to stress that every effort was made by the researcher to reduce such bias to a minimum.

Interview bias was reduced in two main ways. First, an attempt was made to keep questions as open as possible so that informants would be encouraged to generate their own descriptors of subjects or reasons for choice, rather than being asked to approve or disapprove of statements made by the interviewer. Secondly, the researcher adopted the rôle of interested but naive observer in the schools. Pupils, parents and teachers were thus put in the position of experts with valuable information to impart. The fact that the researcher had no connection either with the schools or with the local education authority proved to be particularly advantageous as far as the teachers were concerned, while the fact that the interviewer was not identified as a teacher was an advantage in the pupil interviews.

Strategies used in the interviews to maintain the impartiality

of the interviewer included asking questions such as "What do you think about ...?" or "How do you feel about...?" and encouraging informants to elaborate answers by asking "Why do you think that is?" or "What makes you say that?" This procedure ensured that all descriptors and explanations were generated by the informants and not prompted by the researcher.

Occasionally the researcher/interviewer was asked to give information. Sometimes in these instances reference was made to the school prospectus and answers were prefaced with the words "I think" so that the interviewer would not appear to be an authority. Generally, however, if asked a question the researcher claimed ignorance. Parents and teachers were much more likely than pupils to expect some kind of verbal feedback from the interviewer, and they frequently interspersed their comments with remarks such as "Don't you think?" or "Isn't that right?" In these instances, the researcher endeavoured to give a non-committal or generally approving response. In no case did the interviewer challenge an informant, even when sorely tempted to do so. It is possible that a facial expression might have reflected the interviewer's own views, but if so, this did not appear to deter informants.

In a few of the interviews with pupils, it was apparent that the children were very shy and were likely to reply only in mono-syllables. When this happened it was necessary for the interviewer to make a greater contribution in order to put the pupil at ease. The procedure adopted was to prompt the pupil with information gained from other informants at the same age level, saying for example, "I'm told there's a lot of work in learning a language, what do you think?" In the data analysis, however, the prompted comments were not coded. Only comments subsequently volunteered by the pupil were included in the data to be analysed.

3.5.1 The form two interviews.

All the interviews with form two children were conducted at the intermediate or primary schools concerned. In each case only the interviewer and interviewee were present. An introductory statement was made by the interviewer to explain the purpose of the interview and to confirm the child's willingness to participate (there were no refusals). Then the tape recorder was switched on. All taped

interviews were subsequently transcribed.

The form two interviews were loosely structured but included twelve basic questions, which in the light of the literature review and the pilot study were expected to yield data relevant to the children's choice of optional subjects at secondary school and to their feelings about individual subjects. (See Appendix D.) Some children adapted very happily to the interview situation and offered extra information on the topics discussed. In these cases the interviewer asked supplementary questions to probe unanticipated but possibly relevant data. There was no conscious attempt by the interviewer to use exactly the same wording with each child; rather the emphasis was on ensuring that children understood what they were being asked. If they did not appear to understand, the interviewer had no hesitation in re-wording the questions, while being very careful to avoid suggesting possible answers.

3.5.2 The form three interviews.

The main purpose of the follow-up interviews in form three was to find out if pupils were satisfied with the subjects they had chosen. At the same time, any changes were noted. All interviews took place at the respective high schools, and again, only the interviewer and interviewee were present.

Pupils were asked what they thought of both the core subjects and the options they were taking. Additional questions are noted in Volume II (Appendix C).

3.5.3 The form four and five interviews.

The aim of the initial interviews of pupils in form four was to establish which subjects each pupil had already experienced at school, and also to investigate pupils' attitudes towards those subjects and others which could be picked up at the fifth form level. (Figure 7, p65, shows which subjects require pre-requisites for fifth form study, and which do not.)

The following year when pupils were in the fifth form they were asked what they thought about the subjects they were taking. Additional questions are noted in Volume II (Appendix C).

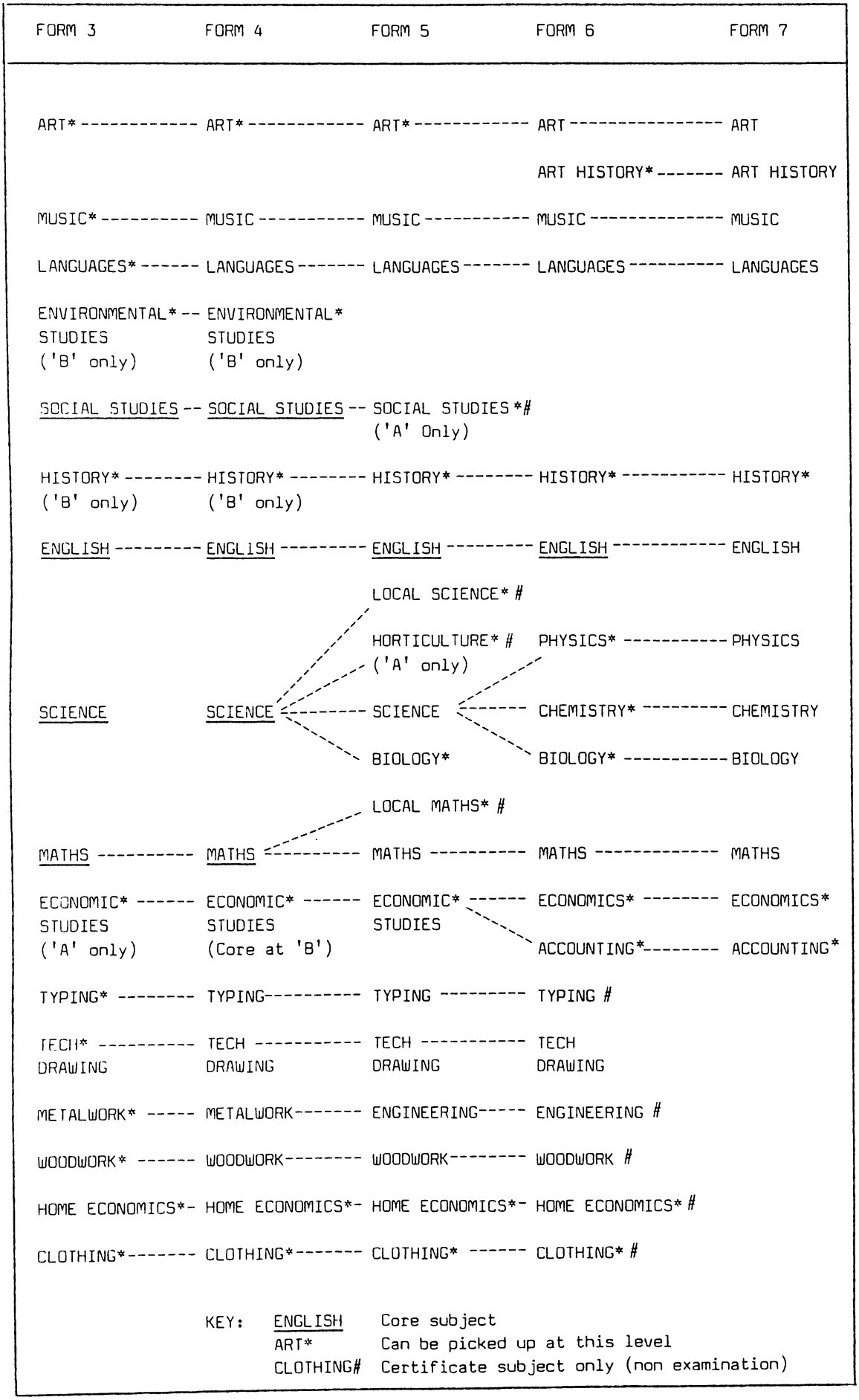


Fig. 7 SUBJECTS OFFERED AT THE TWO HIGH SCHOOLS

3.5.4 Interviews with teachers and parents

The interviews with both parents and teachers were largely unstructured, but some basic questions were asked. Parents were asked to comment on all the third form subjects, both core and options, from the point of view of their child, and were encouraged to make any additional comments they wished. Frequently they commented on the experiences of older children, or of friends' children who were also going through the process of school subject choice. Some parents spoke of the school system in general and of their hopes for their children.

Teachers' interviews ranged in duration from fifteen minutes to nearly two hours, according to the availability of the teacher and his or her willingness to continue the conversation. Two basic questions were asked: "How do you see your subject in terms of the total school curriculum?" and "What comments do you have about the pupils taking your subject?" The second question was trying to find out, indirectly, if teachers viewed their subject as essentially a body of skills and knowledge to be imparted to pupils, or whether they expected to adapt the subject to the pupils taking it. In other words, whether they had a subject-centred or child-centred view of the curriculum, or if their views fell somewhere in between.

3.6 Data analysis.

All of the interview tapes were transcribed in full. A notebook was used to record the salient comments made by each pupil about all of the subjects (core and options) offered at his or her school. Then, in the case of the form two children, these comments were used to provide a subject-by-subject analysis. This is explained in more detail in Chapter Seven, but basically it consisted of ordering the comments on a scale of 1 - 4 in terms of the pupil's likelihood of choosing the subject so that weightings across subjects could be compared. It was not possible to repeat this procedure for the form four pupils because the smaller sample and the greater amount of available choice meant that some subjects were chosen by very few, if any, of the sample.

Pupils' comments about the options were also recorded for each sample to produce an over-all categorization scheme. Every tran-

script was re-examined and all subject descriptors used by each pupil were recorded using a tally system. By comparing the descriptors and sorting them into groups the researcher was able to construct a classification scheme which reflected pupils' major concerns about the optional subjects offered at third and fourth form levels.

Parents' comments were not subjected to the same kind of analysis because the parent sample was very small. However, all parents' comments having some bearing on the major concerns of the study were noted and have been used throughout the report to illustrate parents' perspectives.

Teachers' comments were analysed in a slightly different way because they ranged over a wide variety of topics. Each transcript was first examined in order to identify the different topics covered, again using a tally system. The 89 topics that were recognised were subsequently sorted into categories of concern using a colour-coding system. Those categories recognised as having an important bearing on pupils' subject choice were then examined in detail.

Samples of the research data in its various forms are to be found in the appendices (Volume II).

3.7 Models of the process of subject choice.

Two types of model were constructed from the data. The first was a composite model showing the influences on subject choice as reported by the children interviewed. (See Figure 25, p114.) Since individual children weighed up the information they gathered about subjects in different ways, illustrations of the personal constructs generated by children have been used throughout the research presentation to supplement the model.

The second model was again a composite model, this time showing the decision making process as experienced by the majority of pupils. It was constructed with reference to the events and processes identified in the transcript data, and is set within the constraints of the school option system as detailed in official information such as the school prospectus. This model is described in the following chapter and is subsequently used as the basis for presentation of the research findings. The research flow is shown in Figure 8, p68.

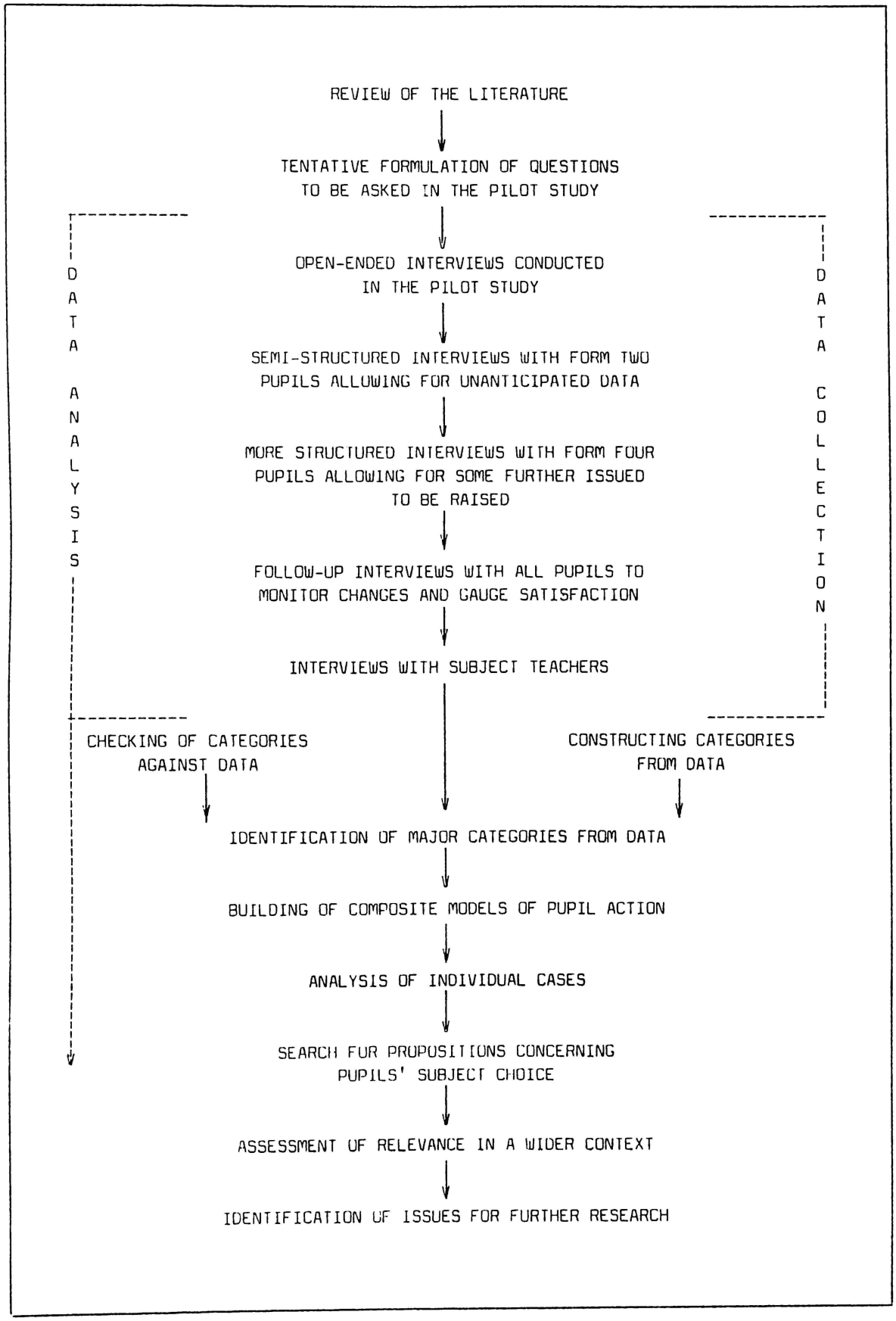


Fig. 8 THE FLOW OF THE RESEARCH

CHAPTER FOUR

A MODEL OF THE DECISION-MAKING PROCESS

OVERVIEW: This chapter describes and explains a model of the decision making process with respect to subject choice. It also outlines the presentation of research findings in the following chapters.

When all the research interview transcripts had been analysed and the events and processes relating to subject choice had been noted for each pupil, a model of the decision-making process was constructed. The model, which is shown in Figure 9, p70, will be used to provide a framework for the presentation of research findings and is explained in the following section.

4.1 The model.

Three major stages in the process of subject choice were identified. These were: information gathering, decision making and rationalization. Each stage was marked by important school events and the total process was found to be constrained by the particular organization of the school option system. Feedback loops were added to the model because it was noted that the process was dynamic and liable to continue for some pupils even after they had made a formal commitment to a decision.

4.1.1 The constraints of the school option system.

Major constraints were imposed by the particular regulations in force at each school. These related to the number of optional subjects that could be taken, the range of subjects offered, and the rules governing choice. There were important differences between schools in each of these aspects. Formal constraints of the option systems will be discussed in Chapter Five, which will also consider some of the informal constraints exercised by teachers on their pupils.

4.1.2 Information gathering.

The initial stage in the process of decision making was found

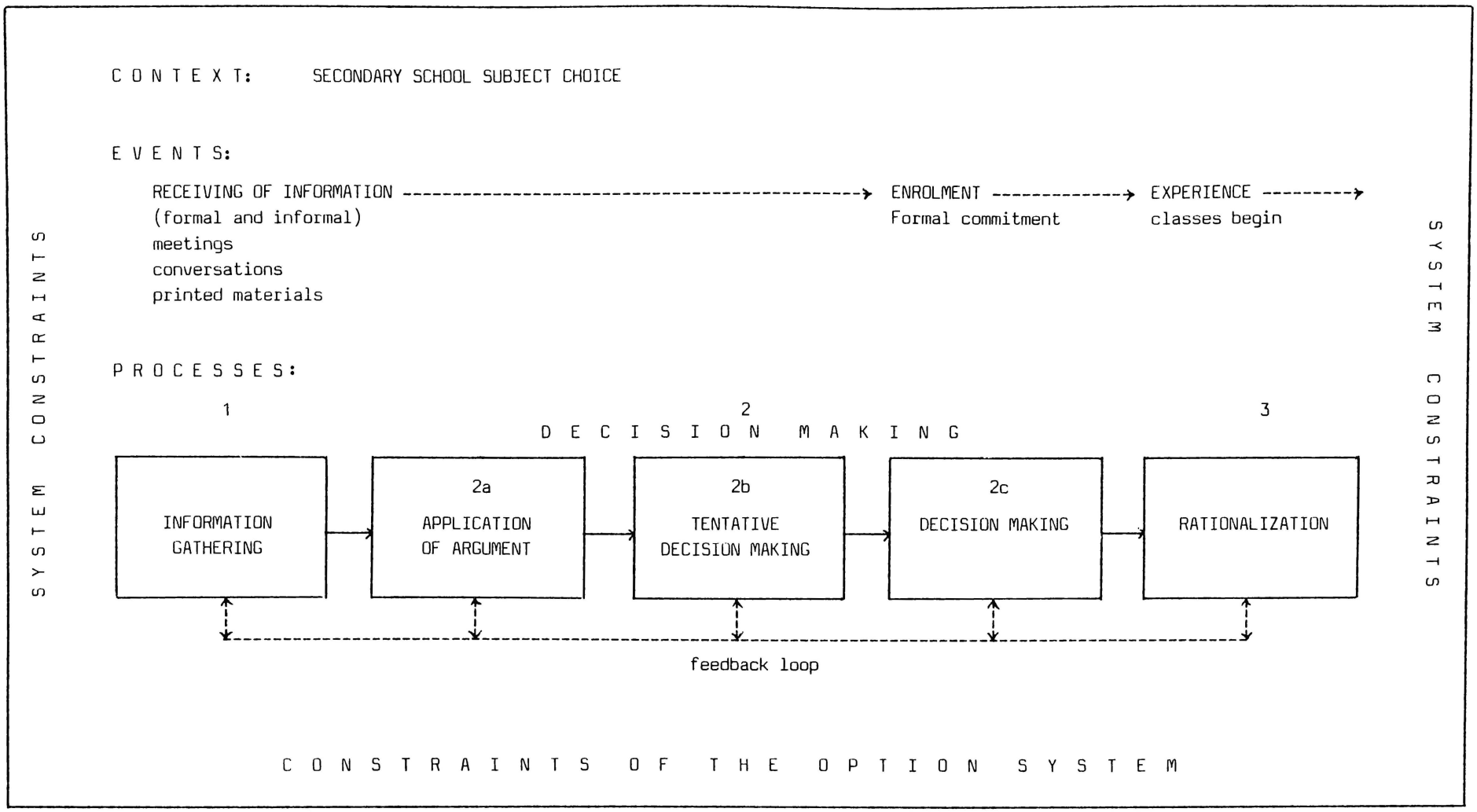


Fig. 9 SECONDARY SCHOOL SUBJECT CHOICE - THE DECISION-MAKING PROCESS

to be information gathering, and it was noted that the range and accuracy of the information gathered by the children had an important effect on the decisions they made, since children who were well-informed were in a better position to make decisions than others who knew little about the subjects offered.

Pupils gathered information about the options by both formal and informal means. Formal access to information was marked at both high schools by the distribution of written material setting out the range of choice available to pupils, informing them of the rules governing choice, and stating when decisions should be finalized. In the case of form two children this information was provided by the high school prospectus and/or enrolment form. The onset of informal information gathering from sources outside the school varied from pupil to pupil and was reported by some to have taken place a year or more before the decisions were due to be made. Information gathering will be examined in detail in Chapter Six, and since parents were acknowledged as important sources of information and advice, especially by the younger children, parents' views will be discussed in Chapter Eleven.

4.1.3 Decision making.

Three major aspects of decision making were identified from the data. These were: application of argument, tentative decision making and decision making.

Arguments for and against the choice of particular subjects were found to vary from subject to subject and from pupil to pupil. The range of arguments offered will be discussed in Chapter Seven, which will also give a subject by subject analysis.

Tentative decision making stemmed from the arguments pupils used to compare one option with another, and it was found that many pupils did not finalize their choice until a formal commitment to a decision was required by the school. This was marked by the handing in of the enrolment form at 'A' High School, and at 'B' High School at a formal interview of child and parent by a member of staff. A minority of children later changed their minds or were re-directed by the school.

4.1.4 Rationalization.

Rationalization was the major process by which pupils accommodated their decisions after they had experienced the subjects they had chosen. It was found that some children's attitudes to the optional subjects changed in the light of experience. Rationalization will be discussed in Chapter Eight.

4.2 Individual differences.

Case studies of individual pupils will be presented in Chapter Nine and a subject study of music will be presented in Chapter Ten. These are offered as an illustration of the range of responses encountered in the study. It will be shown that personal variables between children were as important in the decision making process as the variables children perceived between subjects.

Chapter Eleven will discuss the views of the small parent sample interviewed for the study and Chapter Twelve will summarize the major issues raised by teachers. A summary and conclusions will be given in Chapter Thirteen. Now begins a review of the research findings following the decision making model outlined in this chapter.

CHAPTER FIVE

THE CONSTRAINTS OF THE SCHOOL OPTION SYSTEM

OVERVIEW: School aims and philosophies are outlined and details are given of the core and optional subjects offered at the two high schools. Intended and unintended constraints imposed by the respective option systems are discussed.

Pupils are required to make their choice of optional subjects within certain constraints set by the schools. Aside from government regulations concerning the core, schools in New Zealand have the freedom to offer any range of subjects within any type of structural framework deemed appropriate for their pupils and compatible with the philosophy of the school. This chapter will therefore look first at the formally stated philosophies of the two high schools studied and at the understandings implicit in their respective option systems. Secondly, it will consider some of the informal processes at work to support, or possibly counter, the official view. Information was obtained from school publications, from observations made by the researcher and from transcripts of interviews with parents of intending pupils and with teachers at the two high schools.

5.1 School aims and philosophy.

The official prospectus of 'A' High School provided a clearly stated school aim:

> To provide an interesting school programme which motivates students to have a continuing desire to learn, gives them a sense of achievement, and ensures that they begin to acquire the qualities of good citizens in New Zealand's predominantly bi-cultural society.

The prospectus explained that the organization of the school was designed to reflect the important place in every person's life of an enquiring mind, a concern for others and a desire for self respect. It was claimed that enquiring minds were fostered by the flexible course structure, beginning with a broad academic base and also providing for work exploration. A concern for others was encouraged

by a policy of non-streaming which allowed pupils to develop a tolerance of others and a recognition of the value of differing personal abilities; it was further encouraged through the democratic body of the School Council, and through an emphasis on co-operation and self discipline. The desire for self respect was promoted by making every endeavour to bring students to an awareness of their innate abilities, and by offering them a full range of cultural, sporting and social activities. All of this was summed up in the claim that this was a school "where everybody is somebody".

The researcher was led to believe that school 'A' largely reflected its formally stated aims for two main reasons. One was the fact that none of the teachers interviewed at the school was able to say if a pupil was 'bright' or 'not bright'; the most they would suggest was that a pupil was 'good at' history or Maori or whatever the subject might be. This suggested that the negative aspects of labelling had been avoided by the school's commitment to non-streaming. Secondly, although there were problems due to timetabling and numbers, all pupils at the school were given the opportunity to take six subjects, instead of the usual five, when they reached the fifth form. These subjects could include both School Certificate and non-examinable subjects if pupils wished. In other words, the assumption was not made that only 'bright' pupils could cope with six subjects. Pupils were thus able to take more responsibility for their own learning, since they made the decision themselves. Pupils with problems also seemed to be better off in the non-streamed situation, although one must be wary of generalizations made from individual cases. The case studies of Moana, Matt and Rangi presented in Chapter Nine (p198) show something of the differing effects of streaming and non-streaming on selected pupils.

School 'B' did not present its aims and philosophy as such in its prospectus, which was mainly concerned with giving information pertaining to courses and other school activities. However, there was evidence to be found in the text. For example, the Principal's introductory message noted the school's fine reputation for academic achievement, variety of worthwhile educational activities, thoughtful innovation, and care and concern for all students. It also referred to the school marae (Maori meeting house) whose motto was 'The love and support of all people". Later in the text there was reference to the school's guidance network and to community involvement.

Both schools thus appeared to endorse a child-centred philosophy, though school 'B' may have placed a greater emphasis on achieving high academic standards. The fact that school 'B' was a streamed school tended to support this assumption, although as has previously been noted, the streaming was not based on tests of intelligence or scholastic attainment, but on the recommendations made by teachers of form two at contributing intermediate and primary schools. Nevertheless, teachers at 'B' High School had no difficulty in labelling their pupils 'bright', 'average' or 'below average' in ability; they merely made assumptions based on the pupil's form class.

5.2 The core curricula.

The statutary core offered at all New Zealand secondary schools includes English, maths, science, social studies and physical education as well as some art and/or music. Individual schools may include other subjects in their core.

There were some differences in the core programmes offered at 'A' and 'B' High Schools. School 'A' did not have a core art programme and this meant that any pupil wishing to take art had to take it as an option. School 'B' did have a core art programme which meant that any pupil choosing art as an option would have two art courses, one specialized and one general. This also applied to music at both schools. In addition, School 'A' offered economic studies only as an option, while school 'B' presented this subject as part of the fourth form core and did not offer it as a junior option. Again, this produced important differences between the two schools.

Asked why there was no core art at 'A' High School, the Head of the Art Department there said that it was a matter of timetabling and staffing. This, in turn, was related to overall school policy. He explained:

> *I've asked for more staff virtually since the time I got here. But the demands in so many other areas, the traditional areas shall we say, have blocked us every time. (Art Am)*

The H.O.D. went on to say that in the circumstances he preferred to devote his energies to developing a senior art programme of a high standard, though given the opportunity of extra staffing he would be

keen to institute a core art programme for the junior school. The major problem, however, was the attitude of the school administration:

> *Art, generally speaking, is looked on as being that subject which is often sort of tacked on to the timetable. They don't know what to do with these pupils because they're no good at anything else, chuck them into art. Art is a subject which is not really geared towards careers. They seem to think it is a subject for (a) those who are apparently gifted at it, or (b) if they can't do anything else put them into art. But you've got to be very intelligent to do art, just as intelligent to do art as to do a language or anything else. (Art, Am)*

The Head of the Art Department at 'B' High School also felt that the position of art in a school depended very much on what the administration felt about art as a subject. He said:

> *At the last school I was at, the administration was quite happy with an unqualified, non art-trained H.O.D. in art, and was quite happy with the tick-over level in art going on, presumably because they're more interested in putting money into other areas. That's the way it happens now with the pressure on money and spending. It's all tied up with the school's prestige to attract the biggest rolls and all this kind of competetive stuff now, you see, with the falling rolls. (Art Bm)*

However, he was happy with the position of art at 'B' High School, both as a core subject for juniors and as an option available up to the seventh form.

Music was offered as a core subject at both high schools, but since it will be discussed as a case study in Chapter Ten, it will not be considered at this point. Suffice it to say, that music teachers also saw themselves as having to maintain a high profile as members of small departments in competition with much larger and traditionally secure departments for the available time, money and staffing allowances.

Economic studies was part of the junior core only at 'B' High School, and the Head of the Commerce Department there explained how this occurred:

About four years ago it was thought that economic studies was such an important basic skill for all pupils that it was introduced as a core subject in the fourth form. The result has been to create a demand for economic studies and accounting at fifth form level and beyond. When I first came to this school there was no fifth form economic studies. (Economic studies, Bm)

Although the fourth form core economic studies occupied only two lessons per week, the fact that approximately a quarter of all fifth formers (26.1% of boys and 24.9% of girls) were currently taking economic studies appeared to bear out the teacher's claim.

5.3 The option systems.

Although 'A' and 'B' High Schools were roughly comparable at the time of the research study in terms of size and clientèle, there were major differences in their option systems and in their procedures for pupils' selection of options.

5.3.1 School 'A' - the option system in form three.

'A' High School had an open option system. This meant that it listed the 11 optional third form subjects and asked intending pupils to choose any two from the list, and also to nominate a third subject as a reserve. The list was as follows:

ART
CLOTHING
ECONOMIC STUDIES
FRENCH
GERMAN
HOME ECONOMICS
MAORI LANGUAGE AND CULTURE
MUSIC
METAL AND WOOD TECHNOLOGY
TECHNICAL DRAWING
TYPING

Fig. 10 THIRD FORM OPTIONS AT 'A' HIGH SCHOOL

The third form core subjects at school 'A' were listed as English, maths, physical education, science and social studies. No mention was made of core art or music, but the researcher found that a third

form core music programme had recently been established at the school. Fourth form pupils at the school were offered the same core and option subjects, with the exception of core music and with the addition of shorthand/typing as an option.

Neither the 'A' High School prospectus nor the enrolment form noted that pupils in forms three and four would be placed by the school in additional six-monthly craft courses known as 'directed studies'. Some of the children had heard about these courses from older siblings or from friends, but many had not. Because directed studies could not be chosen and because they did not lead to examination courses in any subject, they were not discussed in detail at the interviews.

5.3.2 School 'B' - the option system in form three.

The option system at 'B' High School was presented in the prospectus as two lists. Pupils were required to choose one subject from the first list and two (half-year courses) from the second. The lists are shown in the figure below.

LIST ONE	LIST TWO
FRENCH	ART
GERMAN	CLOTHING
MAORI	HOME ECONOMICS
ENVIRONMENTAL STUDIES	METALWORK
HISTORY	MUSIC
MUSIC	TECHNICAL DRAWING
	TYPING
	WOODWORK

Fig. 11 THIRD FORM OPTIONS AT 'B' HIGH SCHOOL

The third form core subjects were listed in the 'B' High School prospectus as English, maths, physical education, science, social studies, art and music. The prospectus also contained a paragraph outlining the content of every optional subject offered. Two of the options available at 'B' High School, history and environmental studies, were not offered to pupils at school 'A'. It will also be seen that economic studies, an option at 'A' High School, does not appear on the 'B' High School option list because, as previously

noted, this was a core subject in the fourth form. There were no additional subjects at school 'B' such as the directed studies at school 'A'.

5.3.3. Differences between the option systems in form three.

A major difference between the two schools was that at school 'A' pupils chose only two options, while at school 'B' they were required to choose three. However, it is debatable whether one or other school had a broader subject base because school 'A' provided additional short courses in the form of directed studies and school 'B' in any case required pupils to drop one of their optional subjects in form four.

Because 'A' High School offered the combined subject of metal and wood technology, it effectively gave three options to pupils choosing this subject. However, the combined subject may have deterred some girls because interview data suggested that girls were more favourably disposed towards woodwork than metalwork. The presence of economic studies on this school's option list may well have disadvantaged other subjects at 'A' High School since it was the second most popular choice for third form girls and third equal for boys. (See Figures 12 and 13, p80.)

The most marked differences in pupils' subject choice at the two high schools were a consequence of the 'B' High School two-list option structure. This has been introduced to the school a few years previously after much deliberation by the staff. Teachers explained that the main aim of the system was to divide the subjects into the categories 'culture-based' and 'practical' with the specific aim of requiring all pupils to consider taking a language (French, German or Maori) from list one, and it was claimed that this strategy had been successful. A French teacher said:

> *We quite suddenly, instead of having two third forms (taking French), had three. (French, Bf)*

However, the researcher noted that over-all language demand in the school was only marginally greater than at 'A' High School in form three, and its fifth form retention rate appeared to be lower. The particular limitation of the culture-based list appeared to be

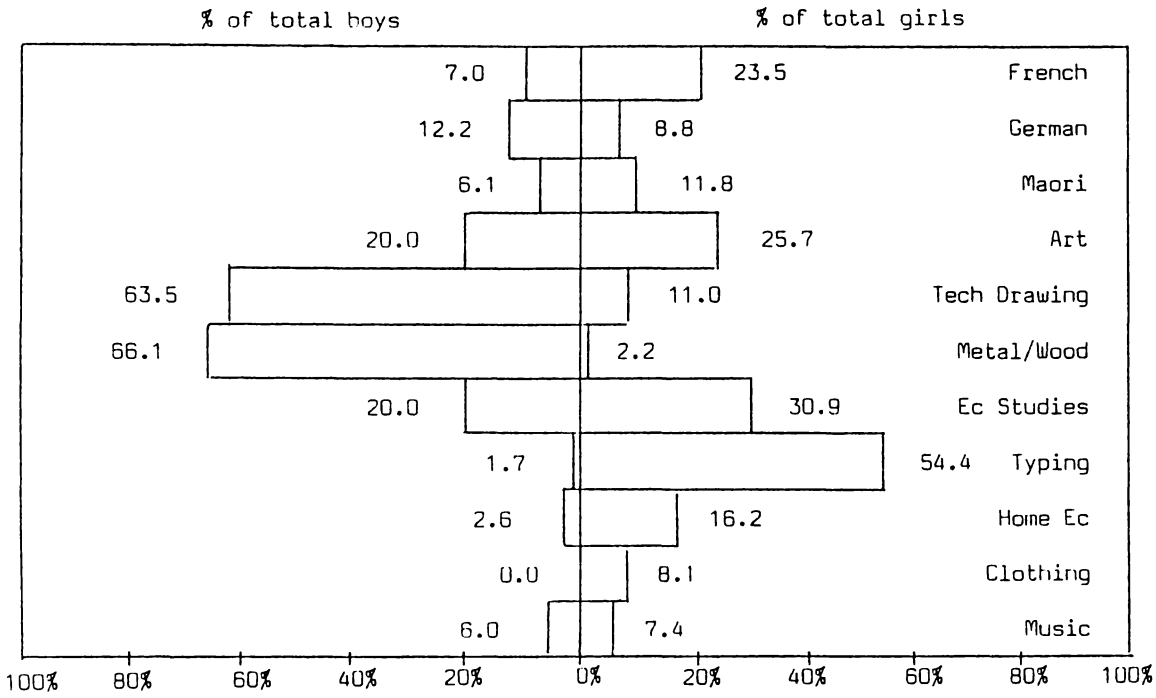


Fig.12 SCHOOL 'A' OPTION CHOICE - THIRD FORM TOTAL (1983)

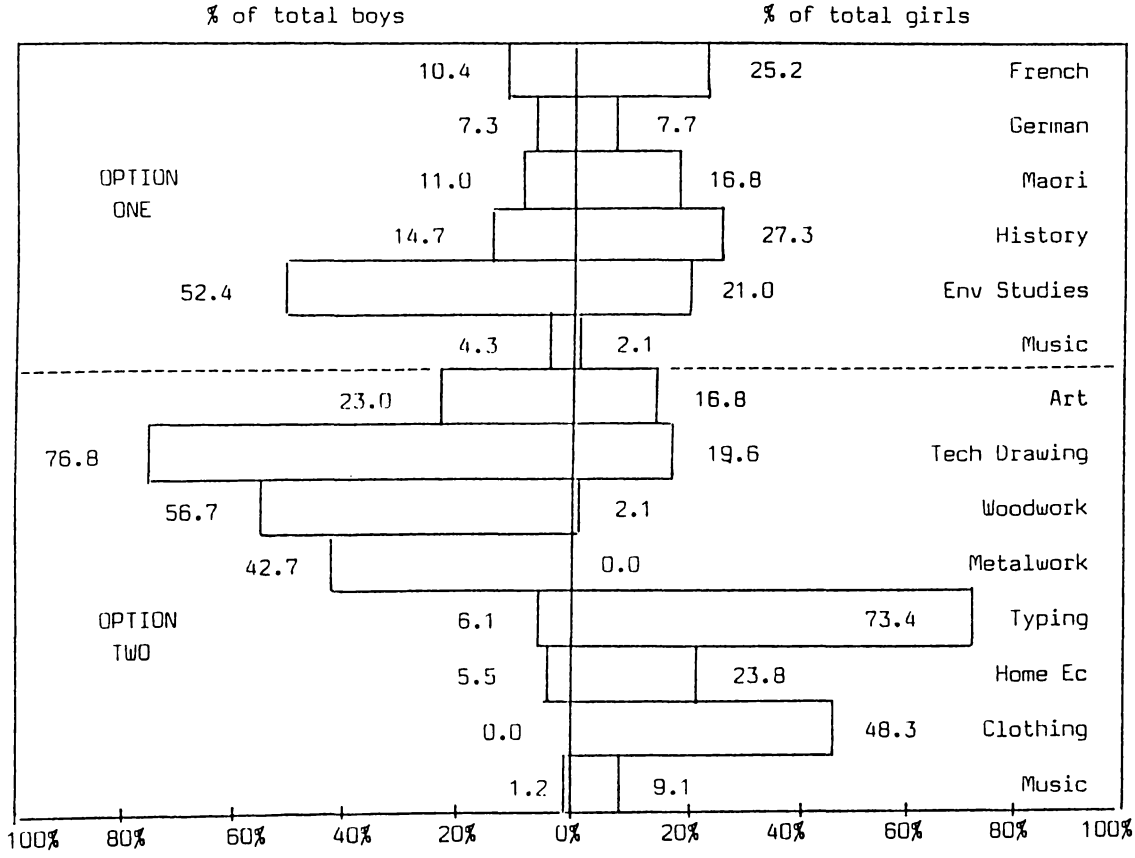


Fig.13 SCHOOL 'B' OPTION CHOICE - THIRD FORM TOTAL (1983)

that as it allowed only one choice, pupils were not able to take two languages in the third form as they could under the open option system at 'A' High School. This did not necessarily disadvantage those wishing to take French and German, since the researcher was told that if there were sufficient demand a beginners' German class would be started in form four. However, it did mean that French and Maori could not be combined. A Maori mother brought up this very point at the 'B' High School Parent/Teacher Meeting, and it was also mentioned by a Maori girl in the fourth form sample (B4 006gm).

The teacher in charge of history at 'B' High School explained why history had been added to the list of culture-based subjects. He said:

> *We considered our children were being historically deprived. Very little history is covered in social studies and when we looked at the fifth, sixth and seventh form syllabus we asked "Where is the New Zealand history?" "Where is the mediaeval history?" and so on. Many of the exciting and interesting periods of the past are just not included...*
>
> *We introduced history at form three level to provide an alternative for those who don't want to study a language and who are not interested in environmental studies. We've had a varying response. Some years quite a large number of children choose to take history. (German, History, Bm)*

In the year of the research study, history was the second most popular choice made by all third formers from list one. It was rather more popular with girls, 27.3% of whom chose it, compared to 14.7% of the boys.

A more significant effect of the two-list system at 'B' High School was to create a demand, particularly among boys, for environmental studies. In fact, more than half the third form boys (52.4%) took this subject. When asked to account for the popularity of environmental studies, the Head of Department said:

> *I think there are probably two reasons. One is the fact that we sell it to the kids a little bit when they come along to enrolment ... I mount a bit of a display of pictures*

> *of volcanoes erupting and fires and earthquakes and that sort of thing... Secondly, there seems to be a lot of awareness of the word 'environment' and the fact that the environment is under threat and we need to do something about it.*
> *(Geog./s.s./env. studies, Bm)*

Thus, through a combination of pupils' reaction to the school's efforts to promote languages, together with this teacher's efforts to promote environmental studies, a major demand was created for a subject that is not even offered at other schools.

5.3.4 School 'A' - the option system in form five.

All fifth form pupils at school 'A' were required to take English, physical education and four or five other subjects chosen from a list of 21. (See Figure 14 below.)

ACCOUNTING	GEOGRAPHY	MUSIC
ART	GERMAN	SCIENCE*
BIOLOGY	HISTORY	SHORTHAND/TYPING
CLOTHING AND TEXTILES	HOME ECONOMICS	SOCIAL STUDIES*
ECONOMIC STUDIES	HORTICULTURE*	TECHNICAL DRAWING
ENGINEERING SHOPWORK	MAORI	TYPING
FRENCH	MATHEMATICS*	WOODWORK

* Denotes a Local Certificate Course.

Fig.14 FIFTH FORM OPTIONS AT 'A' HIGH SCHOOL

All of the fifth form subjects were offered at School Certificate level, with the exception of Local Certificate (non-examination) courses in horticulture and social studies. In addition, Local Certificate courses were offered in maths and science. There was also a work experience scheme for non-academic pupils, which allowed them to go once a week to jobs arranged for them by the school in the neighbouring area.

Any fifth form pupil at 'A' High School could choose to take six subjects instead of the more usual five (in addition to physical education). English was compulsory for all pupils by state regulation, and six-subject pupils were also obliged, for timetabling

reasons, to take maths and science. They could then choose any three other subjects at School Certificate or Local Certificate level.

5.3.5 School 'B' - the option system in form five.

Fifth formers at 'B' High School were offered the same range of subjects as those at 'A' High School with the exception of horticulture, shorthand/typing and social studies. In addition to English, all pupils were obliged to take maths at either School Certificate or Local Certificate level. Only top-stream pupils were allowed to take six subjects and they had less choice than six-subject pupils at school 'A'. They were obliged to take English, maths and science, and to choose between geography, history and music for their fourth subject. This left a choice of two other subjects.

Bottom-stream pupils in a home-room class were given work experience and a non-certificate vocational skills course in addition to their choice of Local or School Certificate subjects. Fifth form subjects listed in the school's prospectus were as shown in Figure 15 below.

ACCOUNTING	FRENCH	MATHEMATICS*
ART	GEOGRAPHY	MUSIC
BIOLOGY	GERMAN	SCIENCE*
CLOTHING AND TEXTILES	HISTORY	TECHNICAL DRAWING
ECONOMIC STUDIES	HOME ECONOMICS	TYPING
ENGINEERING SHOPWORK	MAORI	WOODWORK

* Denotes a Local Certificate course as well as School Certificate.

Fig.15 FIFTH FORM OPTIONS AT 'B' HIGH SCHOOL

5.3.6 Differences between the option systems - form five.

Figures 16 and 17, p84 and p85, show pupils' choices of subjects at the two high schools during the research period. The figures indicate quite substantial differences in fifth form choice at the two schools.

It was found that school 'A' had a more open option system than school 'B' as was the case at the third form level. In addition to

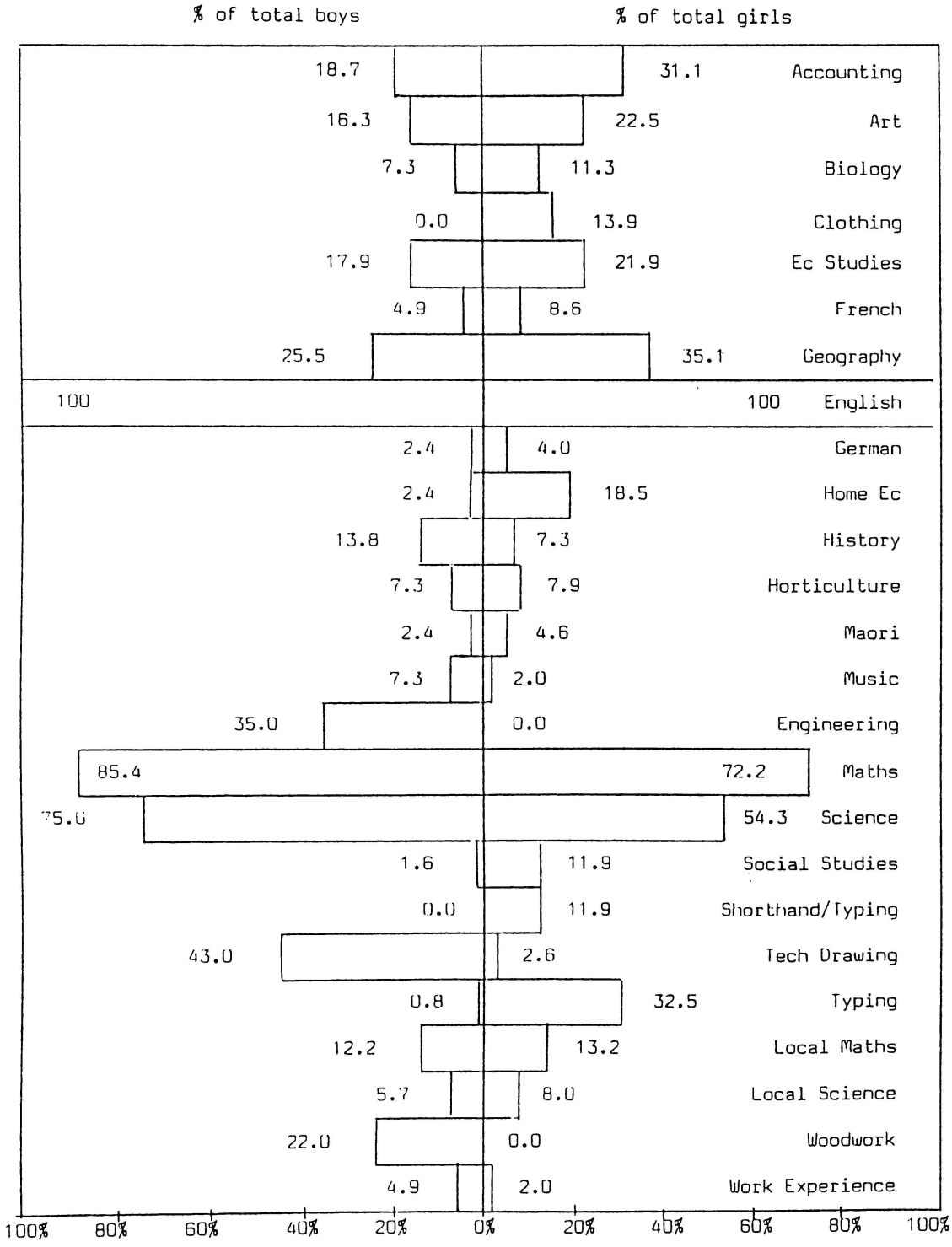
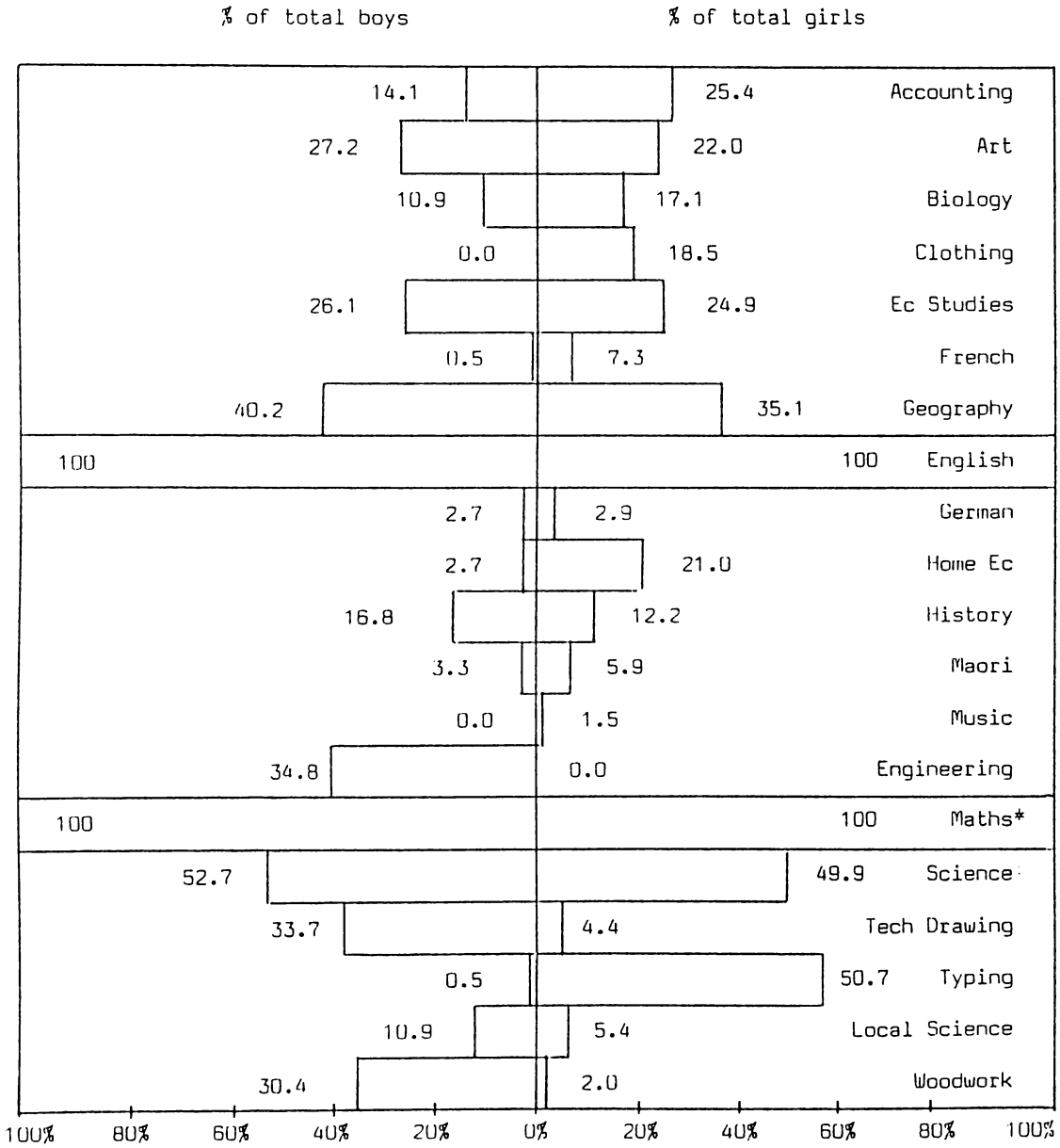


Fig.16 SCHOOL 'A' SUBJECTS TAKEN BY TOTAL FIFTH FORM (1983)



* Includes Local Certificate Maths

Fig.17 SCHOOL 'B' SUBJECTS TAKEN BY TOTAL FIFTH FORM (1983)

the formal constraints of the system at 'B' High School, there was strong evidence of teachers using informal means to influence pupils' subject choice and thereby increase numbers in certain subject areas. Some evidence of this has been seen in connection with the growth of environmental studies in the third form, but the issue will be discussed further in Chapter Six. It will be sufficient to say, at this point, that formal constraints of the system at 'B' High School had the effect of directing able fifth formers towards geography or history rather than music for which most pupils did not have the pre-requisite study. In addition, the school reserved the right to decide who was, or was not, capable of coping with six subjects. In this connection it is interesting to note that even the secondary modern pupils studied by Woods (1979, 1976) were offered seven subjects, while pupils at British grammar schools or comprehensives take up to ten examination subjects.

Perhaps one of the most surprising findings relating to the constraints of the option systems at the two high schools was the fact that neither pupils nor parents expressed dissatisfaction with the system at their school, even though many of them would have known that the systems differed between schools. The researcher was led to conclude that, in general, pupils and their parents accepted the right of the school to define the option system and trusted the school's integrity in this matter. In the light of subsequent findings that some staff were thought by others to be selling their subjects to a degree that could be considered unethical, there remains the possibility that this trust could have been misguided.

CHAPTER SIX

INFORMATION GATHERING

OVERVIEW: The initial stage of information gathering is examined from the point of view of the sample groups, and pupils' access to information is discussed.

Information gathering was found to be a crucial component in the decision-making process. Children who had to make decisions without understanding the nature and content of certain optional subjects and without realizing the long-term implications of their choices were definitely disadvantaged. This chapter will deal with both the formal and informal means of access to information available to pupils and will use the case studies of individual pupils to illustrate some of the varied ways in which information was gathered. First, however, form two pupils' prior experience will be discussed.

6.1 The need for information

Figure 18 below shows that most form two pupils would not have had direct experience of about half of the subjects offered to them as high school options. Even in those subjects they had previously experienced, it was likely that there would be some differences at secondary school level, and when the children were re-interviewed in form three it was evident that this was indeed the case.

SUBJECTS EXPERIENCED BY ALL FORM TWO PUPILS:

Art, Clothing (Sewing), Home Economics (Cooking), Music, Woodwork.

SUBJECTS EXPERIENCED BY SOME PUPILS:

French, Maori, Metalwork.

SUBJECTS NOT EXPERIENCED BY ANY PUPILS:

Economic Studies (offered at School 'A'), Environmental Studies (offered at School 'B'), German, History (offered at School 'B'), Technical Drawing, Typing.

Fig.18 FORM TWO CHILDREN'S EXPERIENCE OF SCHOOL SUBJECTS

Most form two pupils regarded their experience of sewing and cooking at the intermediate schools or manual training centres as indicative of what they might expect of the clothing and home economics offered at high school. Subsequent interviews with teachers of these subjects, however, suggested that pupils' expectations were often unrealistic because the high school subjects contained a good deal of theory in addition to the practical work that children had previously experienced. A teacher at 'B' High School illustrated the problem this caused:

> *I had one little girl say "I come here to cook, not to do this rubbish" and she was really upset about it.*
> *(Home economics Bf)*

Pupil interviews suggested that form two experience was helpful to those choosing woodwork at secondary school, but early experience of art and music was not necessarily indicative of these subjects in form three. French and Maori were offered as options to some of the form two children; others said they had learnt some Maori in their regular classes. On the whole, the children's experience of languages bore little relation to these subjects at secondary school for reasons that will be discussed in Chapter Seven.

Metalwork was a subject experienced by all pupils attending intermediate schools, but not by those from country primary schools who attended manual training centres. A fourth form pupil at 'B' High School indicated that it might also be possible for a girl's experience of metalwork to be more limited than that of a boy. She had expressed an interest in the possibility of taking up an engineering apprenticeship, and explained that she had done metalwork in form one but went on to say:

> *You weren't allowed to do it in form two if you were a girl. (B4 002g)*

None of the form two children had previously experienced German, technical drawing, typing, economic studies (offered to third formers only at school 'A'), or environmental studies and history (offered only at school 'B'). In order to find out about these subjects and any others they had not encountered, the children needed to explore other sources of information, but they had a limited time available to them.

6.2 Time available for information gathering.

The official start of the decision-making process for the form two children was receipt of the high school prospectus and enrolment form, but as may as 25% of those destined for 'A' High School reported having first considered their options during the previous year when they were in form one. Only 42.3% of the sample enrolled at 'A' High School left the start of their deliberations until the school prospectus arrived. However, more than half of the 'B' High School sample (57.6%) waited until they had received their prospectus. (See Table 1 below.)

Several children who had been thinking about their form three subject choice as much as a year before the decision had to be made explained that they had learnt about the options from older brothers or sisters. The significance of older siblings in providing information will be discussed shortly.

Table 1 REPORTED ONSET OF INFORMATION GATHERING (FORM TWO)

IN FORM ONE OR BEFORE	AT THE START OF FORM TWO	IN FORM TWO BEFORE PROSPECTUS	WHEN PROSPECTUS RECEIVED	NOT BEFORE RESEARCH INTERVIEW	SCHOOL
n=6 23%	n=4 15.4%	n=5 19.2%	n=11 42.3%	n=0 0%	'A'
n=3 11.1%	n=3 11.1%	n=5 18.5%	n=15 57.6%	n=1 3.7%	'B'

Children destined for 'A' High School were required to nominate their options on the enrolment form due at the school in mid-September; those destined for 'B' High School had until mid-October to make up their minds. Although the time available for decision making appeared to be important in that the longer the period, the more informal discussion pupils were able to engage in, it appeared that most children actually finalized their decisions only when formal commitment was required by the school and regardless of the total time allowed them. Less than a week before they were due to finalize their choices only 10 (37%) of the 'B' sample were able to tell the researcher which subjects they were going to choose.

For this reason, formal declaration of choice was regarded by the researcher as being a major event in the decision making process.

6.3 Information given by schools to intending third formers.

Both high schools issued a prospectus listing the optional subjects available at each form level and the regulations governing choice. The school 'B' prospectus also gave a descriptive paragraph about each subject. This seemed to the researcher to be an excellent idea, but interviews revealed that some children could not understand the language used in the prospectus, which was presumably intended for parents. This meant that children whose parents did not support them in their decision making were at a disadvantage.

Parents of children enrolled at 'A' High School did not feel that the school gave them enough information about the options before choices had to be made. Mrs Owen said of her son:

> *I don't think he's had much help from the high school. He made up his own mind that was the two he was going to do. I mean, he found out more from his dad than he had from the high school, and economic studies from what he's heard from (his sister). (Mrs Owen Ab)*

And Mr Owen said he had raised the issue at the school the previous year:

> *I had my say at the college after (our daughter) started there, and when they had a thing with all the teachers and you go along and see them, et cetera. I raised the point that they should explain what economic studies is in a prospectus much more thoroughly. My words obviously fell on stony ground because there hasn't been. (Mr Owen Ab)*

However, even parents of children enrolled at 'B' High School could point out examples of how pupils had made uninformed decisions:

> *(My other son) didn't know what engineering was. He didn't know all of the things that it included, so he dipped out there... That's one thing they don't say. They just give them the subjects, they don't say where they go on to. (Mrs Ingold Bb)*

And also:

> *One boy I've struck, he took history because he didn't know what technical drawing was. Well, you see, that was a case where he didn't have a brother to find out what technical drawing really was. His parents mightn't have known. But, you know, it shows that if they're a bit shy they won't ask. (Mrs Ingold Bk)*

Both high schools held Parent/Teacher Meetings for parents of prospective pupils, but less than half the children in each sample reported that a parent had attended, and two of the children enrolled at 'A' High School said that, in any case, the meeting had been held after they had been required to nominate options. A parent explained:

> *There was a day over at the intermediate. Parents could have made an appointment. The headmaster was there. I don't know whether there were other teachers there or not... but that was still after the children had made their decision. (Mrs Keane Ak)*

Another said:

> *By the time we got (the form) home it wasn't very long... If they had a meeting, I mean, either at the high school or the various intermediates where the parents and children could go along and sort of find out, I mean, O.K.*
>
> *(Interviewer: And didn't you have one like that?)*
>
> *There was one afterwards... after you'd actually filled in (the form). (Mrs Owen Ak)*

Children were invited to the 'B' High School meeting along with their parents, but only 30% of the 'B' sample actually attended. One of the parents regretted that:

> *Everyone doesn't go to that night. There's a lot of children that could really afford to go and listen that aren't there. It's the people that probably know something about it that go to all these things. (Mrs Clive Bk)*

And she felt that this had, in turn, caused her own son's reluctance to attend the meeting:

> *He didn't really want to go because he didn't know anyone. I think there was about three kids of his class that were going. (Mrs Clive, Bk)*

Her husband felt that some of the information given at the 'B' High School meeting should have been available much earlier:

> *Let's take typing and home economics, for example. At the interview at the school they tell you that some boys are doing it; some girls do woodwork, some girls do metalwork. But that's the night that everybody goes to the school and it's only two or three weeks before you have your five or ten minute interview at the intermediate school with the teacher. (Mr Clive, Bk)*

And he went on to suggest:

> *Some of the teachers could go down to the intermediate school, probably earlier in the year and give some of these kids food for thought and explain some of these subjects. (Mr Clive, Bk)*

The 'B' High School meeting, which was attended by the researcher, appeared to be an excellent public relations exercise which was well attended, even though it did not draw all intending pupils and their parents. One mother was very enthusiastic:

> *That meeting's fabulous. I've been to two of them now and they're excellent meetings. Lovely atmosphere - and I think they're really good for the kids. They can see that the whole thing's very human and approachable. (Mrs Selby, Bk)*

However, very little information was given at the meeting about the third form options although teachers in charge of the various subject departments were introduced and asked to say a few words. The Head of the Technical Department mentioned that he felt that technical drawing and metalwork were complimentary subjects (as opposed to technical drawing and woodwork, which he saw as less closely related), but at least one boy misunderstood what he said:

They told you not to take two like woodwork and metalwork because you couldn't really take it on - use it for School C. or anything like that. (By2 004k)

Some displays of work, pictures and texts were set up in the 'B' High School assembly hall where the meeting took place, and these presumably reflected the interest of staff and the availability of materials for display, since not all subjects were represented. Many visitors were impressed by the display of technical work, but one boy judged a display of third formers' first efforts as being indicative of what he could expect from technical drawing. He said:

I didn't want to do that 'cos it was too easy... They showed us some drawing and that and it looked a bit boring and a bit easy. (By2 004k)

In addition to its evening meeting for parents and children, 'B' High School arranged for all intending pupils to be interviewed by a senior staff member. Parents were also invited to attend this interview which was held in the respective primary or intermediate schools during the school day. Nearly all of the parents who attended with their children were mothers.

Many of the children to whom the researcher spoke before their official school interview had taken place gave indications that they expected school personnel to assist them in finalizing their choices. In the event, however, the interviews proved much too brief for discussion. It is probable, therefore, that some children did not receive the assistance they required. The researcher spoke to one boy who was waiting with his mother for an interview at 'Bx' Intermediate School. The boy was anxious to inquire about the content of optional music before actually making up his mind, but during his brief interview,which the researcher was given permission to attend, he did not find the opportunity to ask his question. As soon as he mentioned music this was recorded as his choice and the interview was over. Afterwards the boy did not express any regret that he was unable to speak, and appeared to respect the right of school personnel to take the decision out of his hands. The researcher was of the opinion that the staff member conducting the interview was pressed for time in a busy interview schedule, was not aware that the boy had doubts and was seeking information, and was

in any case unlikely to have the precise information the boy required.

In assessing the efforts made by the high schools to provide intending third formers with information about the options, the researcher gained the impression that school 'A' accepted little responsibility for this. School 'B' made a commendable effort to reach pupils and their parents through its more elaborate prospectus, its open Parent/Teacher Meeting and its individual interviews with pupils accompanied by their parents. However, this was still not good enough to provide the kind of assistance needed by some children for the following reasons:

- descriptions of the optional subjects in the prospectus were aimed at parents and were not easily understood by children whose parents did not help them.

- the Parent/Teacher Meeting gave little information about the options in general, and materials were displayed only in selected subject areas.

- personal interviews were too brief for important questions to be addressed.

6.4 Information given by schools to intending fifth formers.

Both high schools were much more successful in providing fourth formers with information about the fifth form options. Of the total fourth form sample, 70.3% reported having received information in addition to the option listings from their respective high schools. There were no references to any particular programme at 'B' High School, but at 'A' High School an information day was set aside for fourth formers. This was organized by the school guidance counsellors and the researcher was fortunate enough to receive an invitation to attend sessions conducted by the guidance counsellors and by one of the Heads of Department. The summaries that follow are taken from notes made by the researcher at the school (1 September 1983).

6.4.1 Information provided by 'A' High School.

Two guidance counsellors, Mrs Phillips and Mr Scott, conducted

sessions on decision making with all fourth formers in the school assembly hall. In the session attended by the researcher, two fourth form classes were spoken to for half a lesson (approximately 20 minutes) by one of the counsellors and then moved to the other counsellor at the other side of the hall. There was a certain amount of noise because the two sessions were being conducted concurrently, and there was also some pressure on the counsellors to rush through their material following an initial delay caused by organizational problems.

Mr Scott began by giving the pupils advice on how to make decisions. He suggested that they draw up a balance sheet for and against a proposition, for example, to leave school at fifteen, under four headings:

material gains to me / material losses to me,
material losses for others / material losses for others,
gains in self approval / losses in self approval,
approval by others / disapproval by others.

Pupils had some trouble in understanding what was meant by the term 'material gains' and Mr Scott therefore took some time to answer their questions, but because of this he did not have time to complete the exercise. He did not explain what was meant by 'self approval' or 'approval/disapproval by others'.

Mr Scott then directed pupils' attention to a set of charts displayed on portable screens. These were commercially produced, coloured charts relating to specific occupational areas. One of these, for example, was headed 'Science and Technology' and it listed major occupations within the field, using a system of colour coding to show the minimum academic qualifications required for each occupation. Mr Scott pointed out that pupils could examine the charts more closely in the Guidance display area at any time.

Finally, Mr Scott handed out to each pupil a sheet of paper on which an octagonal diagram showed various personality characteristics such as 'practical', 'rational' and 'artistic'. He explained that those shown opposite each other on the diagram were least alike, and those adjacent were most alike. He suggested that pupils should consider their own personality traits when thinking of a future

occupation, but the session was over before this idea could be developed.

Mrs Phillips' main aim was to warn pupils of the possible disadvantages of sex-stereotyping, particularly for girls. She explained that most women were employed in a limited number of occupations in areas of rapidly diminishing employment, and she said that for this reason girls should think very seriously about their future jobs. Mrs Phillips had mounted a display of photographs of girls in non-traditional occupations such as house painting and welding which she invited pupils to view more closely. She pointed out that boys in the group could also be limiting themselves by stereotyped thinking about what was a suitable occupation for a man.

Having attended the two guidance sessions, the researcher's first reaction was that probably the counsellors were much more effective in the one-to-one situation than in the group situation. They were obviously pressed for time and were not able to explain themselves clearly to pupils. The researcher also felt that the material used by Mr Scott was unnecessarily sophisticated. He could, for example, have suggested that pupils listed the 'good things' and 'bad things' about leaving school at fifteen, without reference to 'material gains' or 'self approval'.

Mrs Phillips' reference to the dangers of sex-stereotyping reflected the concern expressed by Vocational Guidance Officers in the Department of Labour about the recent rise in unemployment among young female school leavers, which is attributed to the decline in numbers of jobs traditionally held by women, and to a general reluctance among girls to consider alternatives. However, research suggests that girls may be influenced more by general attitudes of teachers and others, than by information sessions such as this (Abigail, 1982; McGrath, 1982), and interviews with pupils for the present study suggested that attitudes may become fixed at a much earlier age.

Nevertheless, the researcher felt that sessions conducted by guidance counsellors at 'A' High School reflected their care and concern for pupils making decisions regarding fifth form subjects and future occupations. At the very least, pupils were made aware of the information and assistance available to them through the

school's Guidance Department, to which they could gain access at any time.

After their sessions with the guidance counsellors concerning occupational choice, the school 'A' fourth formers were sent in their class groups to several different classrooms where they were to be given information about the fifth form options by teachers in charge of the various subjects. The researcher was able to accompany one class to a session conducted by the Head of the Science Department.

The science briefing session was held in a laboratory which had four large, clear, hand-made posters displayed along its side wall. The posters were labelled 'Science", 'Horticulture', 'Local Certificate Science' and 'Biology', and they listed some of the fifth form topics covered in each subject. The teacher directed pupils' attention to the posters and then outlined the content of each of the science subjects shown. He endeavoured to make clear to the class that in most cases they would be wise to keep their options open by taking School Certificate science. If they chose to take six subjects in the fifth form, instead of the usual five, they might also choose to do biology or horticulture. They should only take biology on its own if they had definitely decided to leave school at the end of the fifth form year, because they would need a general science background if they wished to take biology in form six. He explained that horticulture, a new subject in the school, was basically a practical subject, but because it also had some theoretical content it could not be considered an easy option. The teacher went on to explain that there was no stigma attached to taking Local Certificate Science. He suggested that people who had some difficulties with school subjects should concentrate on doing fewer School Certificate subjects so that they might have a better chance of passing the ones they took. He said that the Local Science syllabus was extremely interesting and included such things as horticulture, human biology and flight, and he explained that assessment was based on pupils' personal qualities such as application to work, rather than on their academic ability.

The researcher felt that the information given in this session was presented in a non-biased way and that no undue pressure was put on pupils to take one subject rather than another. The consequences of certain decisions were, however, pointed out so that pupils would

be in a position to make rational decisions about their fifth form options, the most important message being that they should keep their options open by taking general science, if they expected to proceed to the sixth form.

6.4.2 Information provided by 'B' High School.

The researcher was not informed of any sessions taking place at 'B' High School similar to those conducted with fourth formers at school 'A'. 'B' High School fourth formers were given option lists and also had access to the more detailed prospectus (containing some information about course content) published by their school. However, one department, the Commerce Department, issued booklets to all fourth formers outlining the course offered in accounting, economics and typing and suggesting the kinds of job opportunities and qualifications these might lead to. It has been noted earlier in this chapter that this was the kind of information parents felt would be useful (p90), but there was evidence that other teachers thought this kind of subject promotion was unethical. (See Chapter Twelve, p240.)

As at 'A' High School, the 'B' High School pupils were free to approach teachers for information about the fifth form subjects and could also obtain printed information about job opportunities from the Guidance Department. In addition, personal interviews were available by appointment as was the case at 'A' High School.

6.5 Informal information gathering.

It was clear to the researcher that the majority of the form two sample felt that choosing their form three subjects was a very important task, and they discussed it with a wide range of people. Among those mentioned were 'my auntie', 'the girl up the street' and 'a boy who's staying with us'. Figure 19, p99, summarizes the sources of information and advice mentioned by the total form two sample which can be compared with sources of information reported by the form four sample in Figure 20, p99. While reaffirming the important rôle of parents, noted in previous research (Woods, 1979; Douglas, 1968; Jackson and Marsden, 1962), the figures show that form two children made use of a much wider information network than

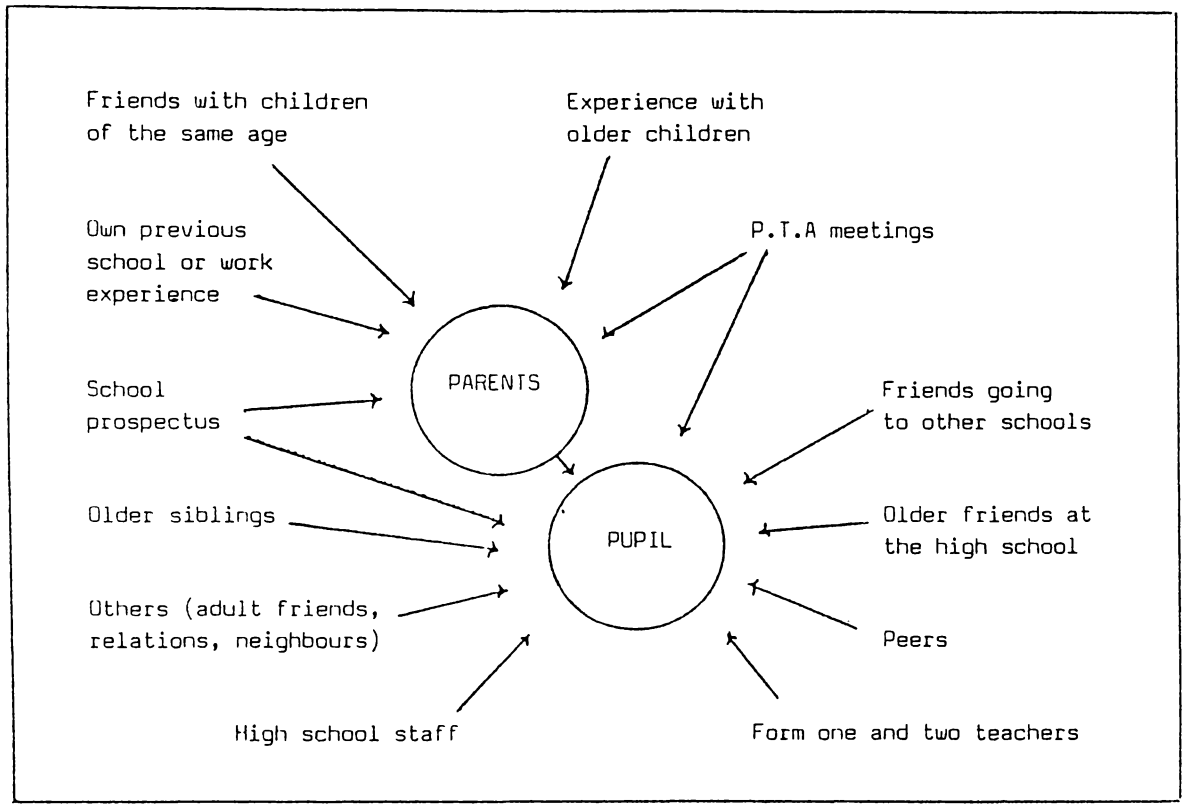


Fig. 19 SOURCES OF INFORMATION REPORTED BY FORM TWO PUPILS

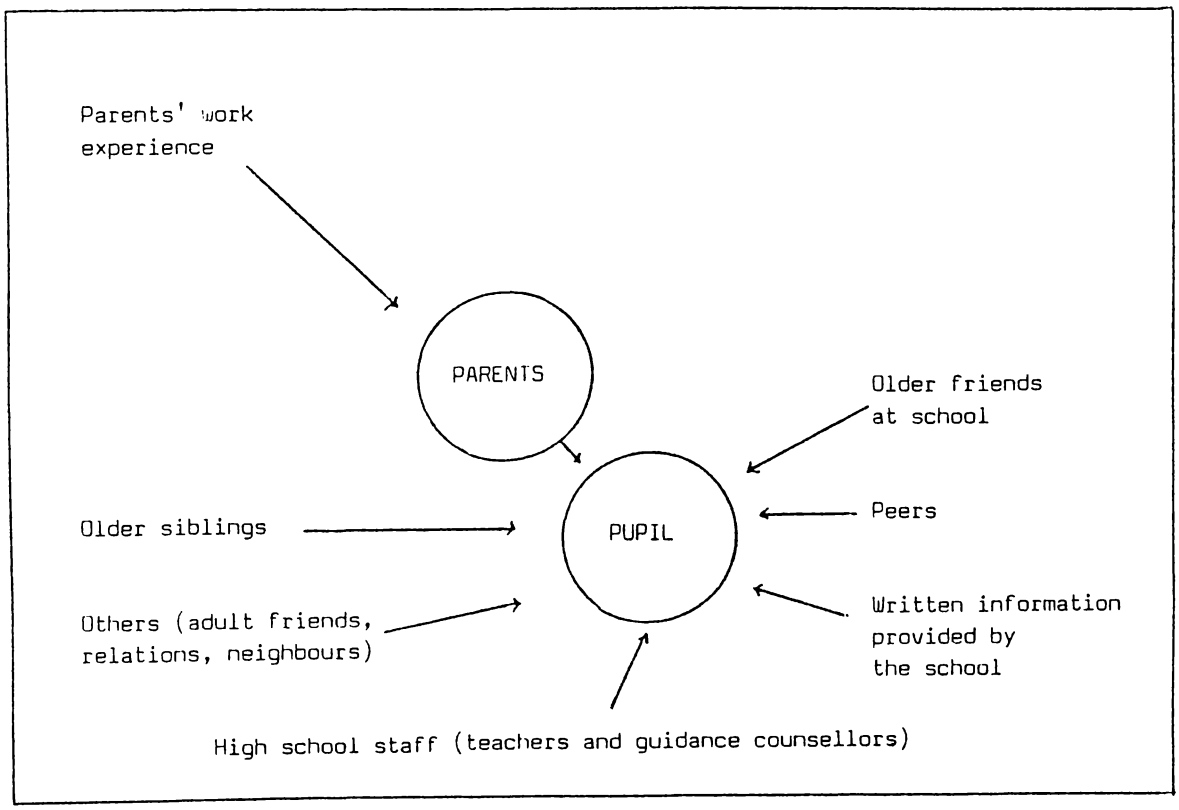


Fig. 20 SOURCES OF INFORMATION REPORTED BY FORM FOUR PUPILS

did older pupils who not only had experience of more of the subjects offered to them, but also had on-the-spot access to teachers who could provide them with the information they needed. The most important sources of information for each sample group are shown in the figures below. Figure 21 shows that younger children made greater reference to parents, particularly mothers (80.8%), while Figure 22 shows that among the older children, peers, teachers and older siblings were more frequently mentioned as sources of information than parents (78.4%, 78.4% and 70.3% respectively).

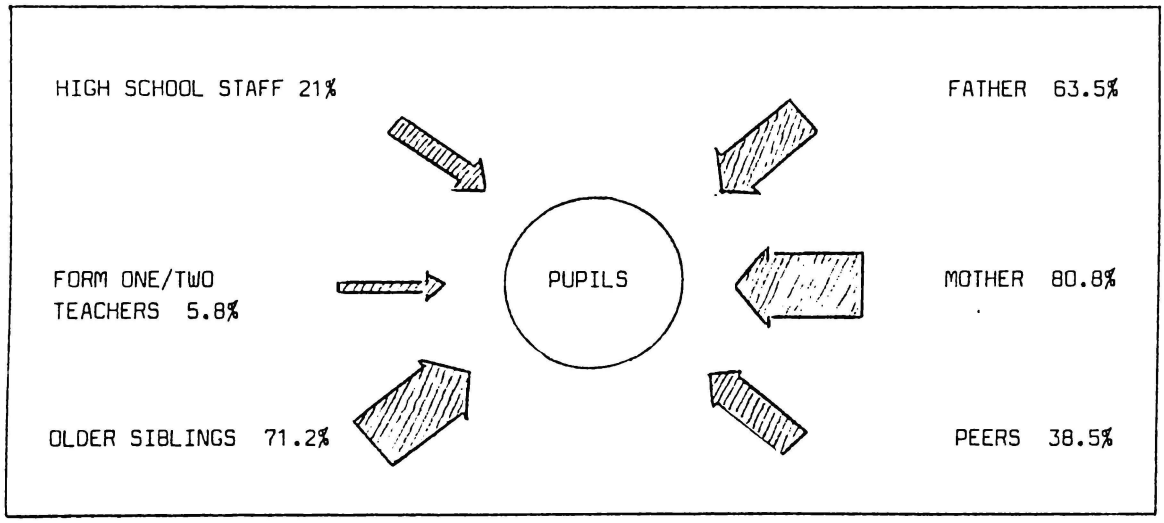


Fig. 21 PERCENTAGES OF FORM TWO SAMPLE REPORTING INFORMATION FROM PARENTS, TEACHERS, PEERS AND OLDER SIBLINGS. (n=52)

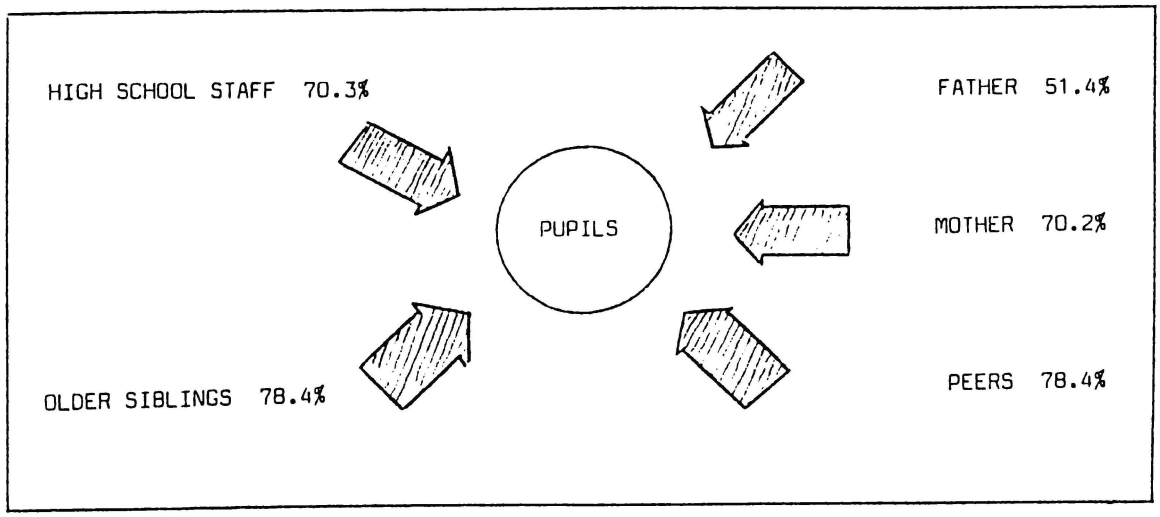


Fig. 22 PERCENTAGES OF FORM FOUR SAMPLE REPORTING INFORMATION FROM PARENTS, TEACHERS, PEERS AND OLDER SIBLINGS. (n=37)

The large percentage of older children who reported having discussed their choices with peers contradicts claims made by Ryrie et al. (1979) and Bunce (1970) that pupils did not confer to any large extent with their peers. However, it is likely that the interview method used in the present study was more efficient in uncovering this data than were the questionnaires used in previous studies. This was in spite of the fact that a number of pupils, particularly the younger ones, reported having been explicitly warned by their parents not to be influenced by friends. (The percentages recorded include only those pupils who spoke of having discussed their subject choice with friends, not those who said they had merely told their friends what they were going to choose.)

5.6 Specific cases.

Four interviews have been chosen to illustrate some important facts relating to the early stages of decision making. First, two of the younger children's responses will be compared to show the differences in access to information experienced by a child with older siblings and another who was the eldest child in the family. Then two older girls' responses will be compared to show the degree of accord between friends.

5.6.1 Brian and Margaret.

Brian (Bx 007b) was among those with very limited access to information. During the course of his initial interview it emerged that he and his two younger brothers lived with their mother, a solo parent. Brian had not attended the evening meeting held at 'B' High School for prospective pupils and their parents because, he said:

> *I only got one parent and she was .. Mum was busy.*

And he had not had the opportunity to talk about the subject choice with his mother:

> *We haven't really discussed it yet, but, um.. got all the stuff at home. Just, Mum hasn't had much time. Just gotta wait - not be impatient.*

(Interviewer: Do you think she will tell you what to do, or will she let you choose?)

She'll let me choose, and if she doesn't think it's good enough, well, she'll tell me.

Brian did have a copy of the school prospectus but it was obvious that he had either not read or not understood much of it, possibly because he was a poor reader. He explained:

Sometimes I find my reading difficult and I go to the special teacher.

Even his own experience was not always helpful. When asked what he thought about science, Brian said:

I don't really like that much, but.. oh, it just depends what the subject is. If it's, say, if it's something like old people and that, that's interesting.

(Interviewer: Wait a minute, 'old people'? Are you thinking of social science?

Yes.

It seemed also that he was not aware of future educational opportunities, having heard of 'university' and 'degrees' but somehow mixing them up with the school system:

I'm gonna go through university and leave when I've finished going through university and sit my U.E. and School Certificate, and when I get through high school I'll leave and go look for a job. First I'll get my degrees.

(Interviewer: And what do you think you might do when you leave high school?)

Be an electrician.

(Interviewer: Do you think you'll need some training for that?)

Yes.

Interviewer: What kind of training does it need?)

Um, skills on what bits and pieces are. Like what are resistors used for. All different things.

(Interviewer: Would you learn on the job or would you have to go to a place to learn those things?)

At university.. might teach you, if they had a class.

Up to the time of his interview with the researcher, Brian had discussed his subject choice only with friends. These included boys in his class at the intermediate school and other boys already attending the high school. The latter had told him about German and he had gained the impression that this would be more accessible to him than French, if he should want to choose it. He said:

Oh well, I don't think I'll take French because it's hard to get and a lot of people go for it. I'd go for it if there wasn't so many people going for it. I was thinking about it... I might take German 'cos it's .. not many people don't take it or go for it. They're all after French.

Other children had told the researcher of an over-crowded French class at the intermediate school and Brian may have assumed that high school classes would be the same, though in fact they were not.

At the time of his research interview Brian appeared to be in possession of very little valid information about the high school options. In the event, he based his choices of the half-yearly options on his experience of woodwork and metalwork at the intermediate school. His choice of environmental studies as a full-year option is likely to have been based on information from his classmates. Indeed, all three of his choices were popular choices for boys.

In contrast to Brian, Margaret (Ax 001g) came from a family comprising mother, father, three older sisters and two older brothers in addition to herself. She had discussed her choices with a large number of people and was well aware of what to expect of most of the subjects offered at the high school. She said, for example:

My sisters went to ('A') High and they always tell me, you know, what they think of certain subjects.

Unlike many other form two children, Margaret was aware that the

practical subjects at high school would contain a certain amount of theory. She said of clothing:

> *You don't do much sewing. You do fibres and that sort of thing, and that gets a bit monotonous.*

She had selected home economics as one of her options and explained:

> *Home economics has got quite a lot of theory actually, but it's about foods and what type of foods you eat, and what not, you know. What's good for you to eat and what's absolutely not good for you to eat, and it'll be good to know... With clothing, it's just fibres, and it's just clothing materials and knitting materials and that sort of thing. Home economics theory will be a lot more interesting.*

Margaret did not mention her brothers specifically as providing her with information, and of her father, she said:

> *Well, he's interested. He likes to know what I take, but he lets me choose on my own.*

However, her mother had an important influence:

> *She actually put... home economics into my head... She was actually the one that wanted me to do home economics... She wanted me to do either clothing or home economics, and I wasn't going to take clothing, so I thought well, I'll take home economics. I probably would've anyway, I don't know, but I wanted to please her in a way, so I took home economics.*

Margaret had found out about technical drawing through seeing an older girl's folder. Another friend had some part in her choice of typing:

> *I've got one good friend and she was taking typing and I asked her the reasons why she was taking typing and she said, well, her mother was a secretary for a start, you know, and that kind of influenced her. And I thought typing might be a good subject to take, and I thought about it, and I thought about it, and so she kind of influenced me.*

Thus, Margaret was guided by her mother, but she was able to draw on the experiences of others in finalizing her decisions. Interestingly, she discussed her choices only with her mother, sisters, and female friends, possibly making the assumption that their experience was most relevant to her needs. Her comment about metal and wood technology, traditionally a boys' subject, seemed to indicate this:

> *I like that, but I keep cutting myself and I carve the wrong things. I mean, I'm absolutely hopeless at it, but I really like it. But I'm so hopeless I don't think I'll get anywhere in it. I mean, what in my life would I do with metalwork and woodwork?*

Margaret, with her wide information network, had tended to discuss her choices with girls, while Brian, with much more limited access to information, tended to discuss his choices with boys. These two interviews showed how children may be influenced by the opinions and experiences of peers, and suggest that same-sex peers may be most influential. This could have a bearing on the sex differences in choice.

In summary, the cases of Brian and Margaret show something of the range of access to information experienced by the form two children, Brian being disadvantaged by his family situation and by the fact that he had no older siblings able to tell him about the high school subjects, and Margaret being relatively advantaged.

6.6.2 Mary and Joan.

Two girls who were later identified as friends were interviewed among the fourth form sample at 'A' High School. Analysis of their interview data suggested that although Joan (A4 011g) claimed that they were doing the same subjects because they had the same interests, it was likely that their mutual choice was made to suit Mary (A4 010g), the dominant partner in the friendship.

The subjects chosen by the two girls for their fifth form year, in addition to English, were maths, accounting and typing at School Certificate level and social studies as a non-School Certificate subject. For both girls, their attitudes to teachers appeared to

influence their thinking about the individual subjects, but Mary was able to quote the opinions and experiences of members of her family, while Joan mentioned only her friend Mary and Mary's brother.

Of the subjects the girls were going to take in form five, English was compulsory. Mary said she quite liked English because she liked writing and reading, and Joan said it was 'alright'. They both mentioned that they had not done much work that year because their teacher was often absent.

The girls were ambivalent about maths. Mary said:

> *Sometimes I like it, sometimes I don't. (Ax4 010g)*

She explained that she liked her teacher and thought that maths might help with accounting which she had also chosen, but found that the subject was getting harder. She said that her parents wanted her to take maths in form five. Joan also said that she found maths a bit hard. She said her parents were not very pleased about her marks in a recent test, but she put some of the blame on her teacher for not saying that they were going to have a test that day. She gave no reason for her choice of maths in the fifth form.

Both girls had chosen to take accounting in the fifth form, and this had apparently stemmed from their choice of economic studies as a third form subject. Joan said she found economic studies quite interesting and explained why she had made the original choice:

> *My friend (Mary) was taking it and she said it's quite good. Her brother had taken it and he said it was good, so I thought I might as well try it. (A4 011g)*

Thus it appeared that Joan had chosen to take economic studies originally on the recommendation of Mary's brother and because Mary herself was taking it. When interviewed, Mary said she felt that economic studies was a bit above her head but it had included a taste of accounting which she was keen to take in the fifth form. She gave her preferred occupation as hairdressing and said she thought that accounting would help her if she decided to set up a hairdressing business in the future. Her friend Joan had no

such reason for choosing accounting, presumably, since she had nominated primary teaching as a possible future occupation. However, Joan said she thought accounting was easier than economic studies and it was quite interesting. She, like Mary, also felt it might help her with her maths.

Both friends had chosen to take social studies as a non-examination subject in the fifth form. Mary said it was a subject she enjoyed, and since she hoped to get a job at the end of her fifth form year she was not concerned that social studies was not offered in the sixth form. She said:

> *If I don't (get a job) I'll come back and find another subject I can take. (A4 010g)*

Joan's choice of social studies was also based on subject liking, possibly enhanced by the fact that her friend had chosen it. However, if Joan seriously intended to pursue the idea of primary teaching, it would seem unwise for her to take only four School Certificate subjects.

Mary and Joan were both taking shorthand and typing in the fourth form but had decided to concentrate on typing only in the fifth form. Mary thought that doing shorthand resulted in her having less time to spend on typing which was 'going down', while Joan said she was 'useless' at shorthand. Mary's original choice of typing in form three was apparently the suggestion of her father who ran his own business, but had no secretary. Thus once again the impetus for the friends' mutual choice was provided by Mary and her family. (See Figure 23, p108, for the girls' comments on their chosen subjects, and Figure 24, p109 for comments on the subjects they rejected.)

Perhaps the most interesting decision the two girls had in common was their decision not to take science. This could possibly have affected Joan's potential as a primary school teacher, yet she herself said:

> *I don't think it will help me in anything I want to do. (A4 011g)*

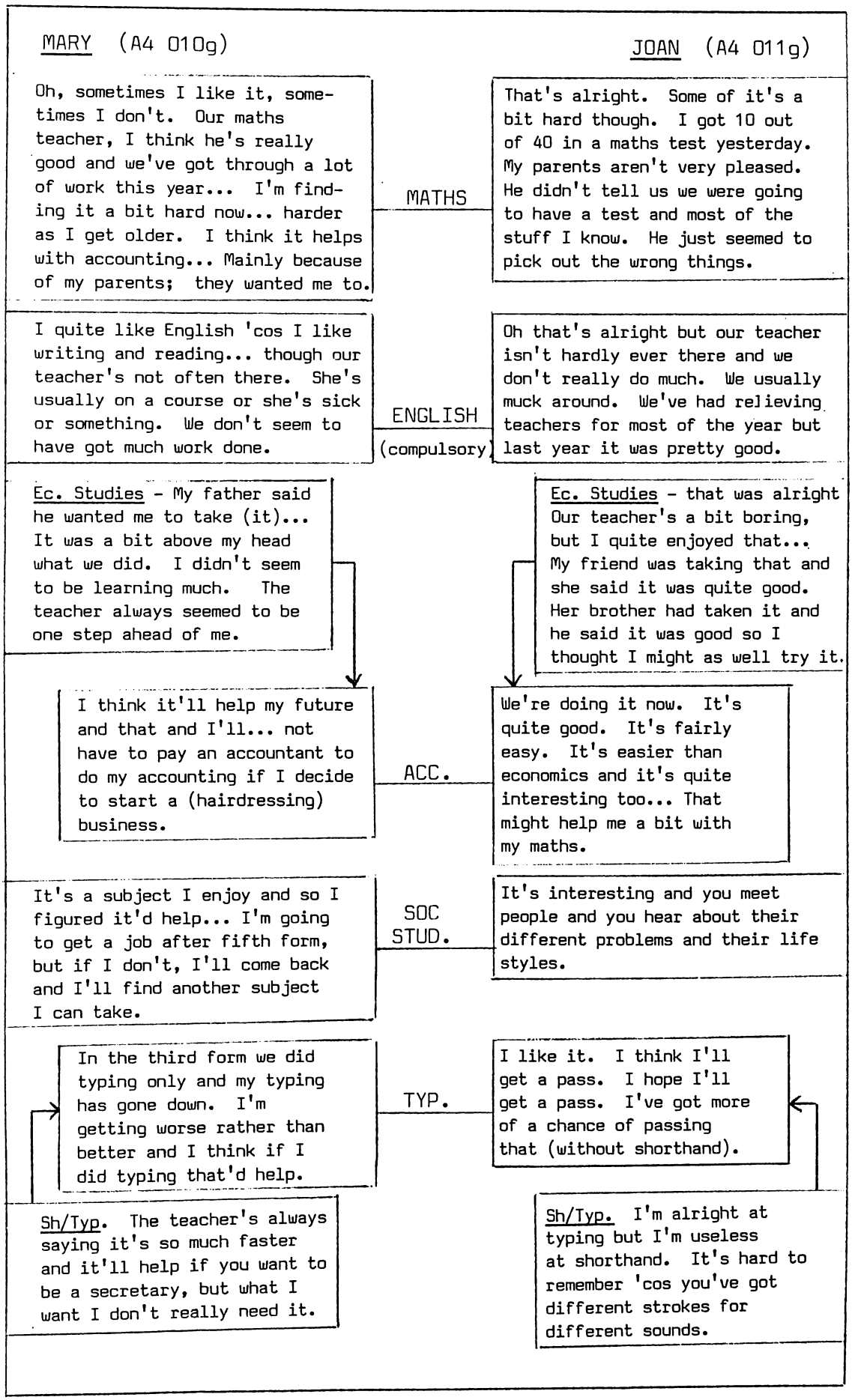


Fig. 23 MARY AND JOAN - FIFTH FORM CHOICES

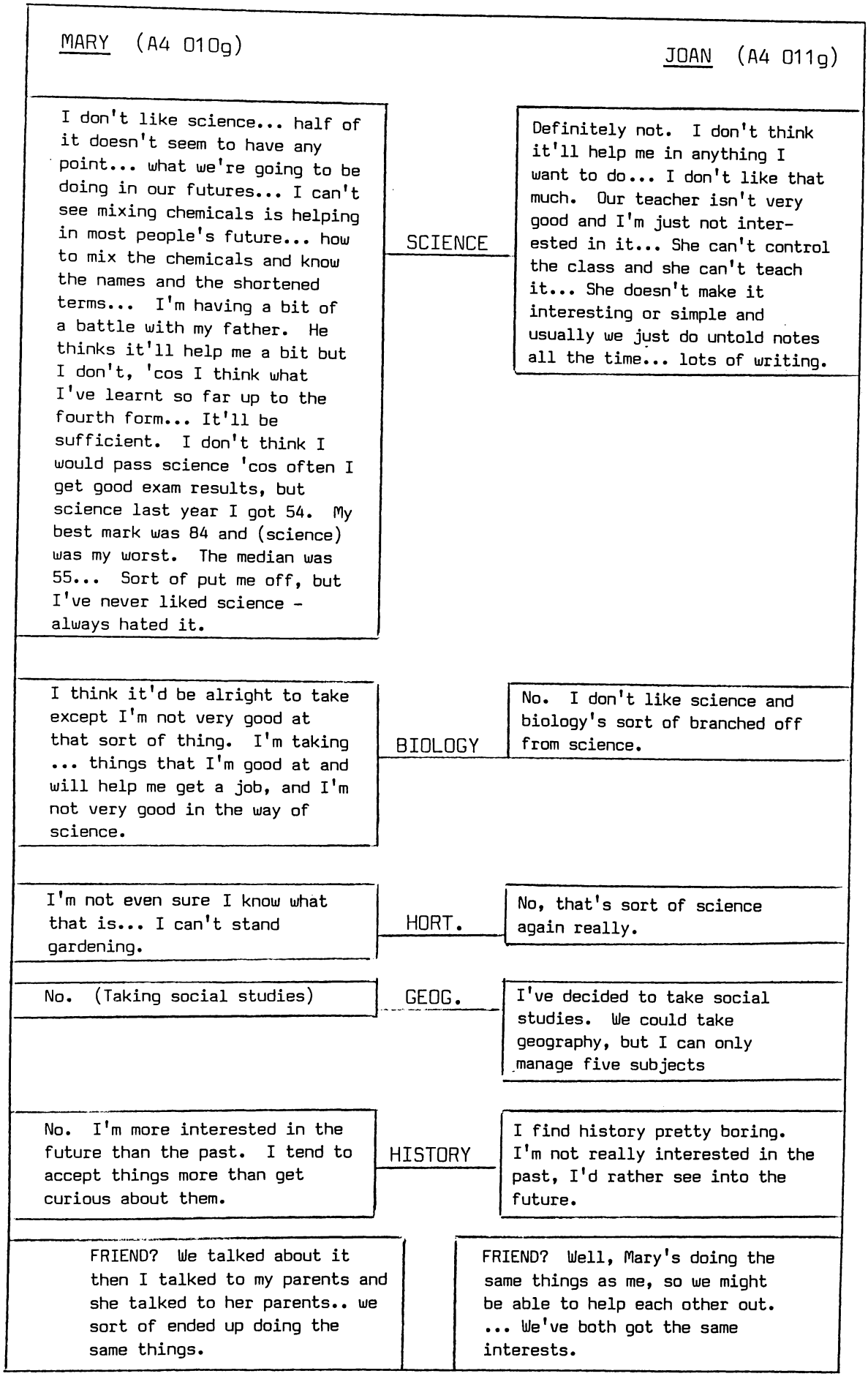


Fig. 24 MARY AND JOAN - SUBJECTS REJECTED

Joan said that she was just not interested in science and that her fourth form science teacher was not very good. It may be that once again she had taken her cue from Mary, who explained:

> *I don't like science... Half of it doesn't seem to have any point... what we're going to be doing in our futures... I think what I've learnt so far up to the fourth form, it'll be sufficient. (A4 010g)*

According to Mary, she was having 'a bit of a battle' with her father who thought that science would help her, but she evidently saw no connection between 'mixing chemicals' and her chosen career of hairdressing. Interestingly, Mary considered science to be her 'worst' subject, even though her last school examination mark was close to the class median. The fact that she mentioned getting 84% in her 'best' subject suggested that marks were important to her, but she also insisted:

> *I've never liked science - always hated it. (A4 010g)*

Mary and Joan gave almost identical reasons for rejecting history as a possible choice:

> *I'm more interested in the future than I am in the past. I tend to accept things... more than get curious about them. (A4 010g)*

and

> *I find history pretty boring. I'm not really interested in the past. I'd rather see into the future. (A4 011g)*

It is worth noting here that the possibility of the girls having been able to discuss their interview responses is very remote, since Joan's interview followed immediately on that of her friend.

In summary, it appeared that Mary was the dominant partner in the friendship. In the matter of subject choice, Mary was able to relate her reasons for choice to job potential and to the advice she had received from home, as well as to her own subject preference. Joan gave fewer reasons for her choices and said that her parents

did not give her any help and allowed her to take what she wanted. Joan mentioned that she was taking the same subjects as her friend and claimed that they had the same interests, though they had different aspirations for the future. During the course of her form four interview Joan mentioned that she was intending to resign from the Air Training Corps, to which she and Mary belonged, because she found it boring. This suggested that she had taken up the same 'interest' as Mary because they were friends, rather than that they were friends because they had the same interests. It is possible that this had also happened in the case of their mutual subject choice.

6.7 Summary and conclusions.

It was found that insufficient information was made available to the form two children and their parents as a result of the formal dissemination of information by the two high schools. However, 'B' High School was able to provide more information to intending pupils and their parents, than its counterpart, by means of a more elaborate prospectus and an evening meeting to which parents and their children were invited. School 'A' was criticized by parents for giving only a minimum of information to intending pupils, for allowing only a short time for the important decisions to be made, and for failing to hold its Parent/Teacher Meeting before the children's subject choice had to be finalized.

At the fourth form level, however, school 'A' made a greater effort to inform pupils about the fifth form options available to them, and to assist them by pointing out some of the implications of particular choices. At school 'B' individual teachers and subject departments provided the information on an informal basis. Both schools offered pupils individual assistance through their respective Guidance Departments on request.

It was also found that in addition to their formal access to information, most children had developed a wide informal information network particularly among family and friends. Mothers were the most important source of information for the form two children. Peers and older siblings were equally important as sources of information for the form four pupils. Case studies suggested that

pupils with older brothers or sisters were relatively advantaged in their access to information about the optional subjects; eldest and only children were relatively disadvantaged. Case studies also suggested that the views of same-sex peers strongly influenced the decisions of some pupils.

CHAPTER SEVEN

DECISION MAKING

OVERVIEW: This chapter examines the decision making stage. Particular attention is paid to pupils' prior knowledge and to the range of arguments they use to categorize the different subjects.

In Chapters Five and Six it was shown that two main factors determined the subject choices available to pupils. These were (a) school constraints imposed by the option structure, and (b) the information that pupils either already possessed or managed to gather prior to making their choices. The former imposed constraints that pupils could not generally change but had to take into account, the latter shaped pupils' attitudes towards and expectations of subjects, and ultimately provided the basis for the arguments developed and applied for and against choice of particular subjects (See Figure 25, p114.)

Analysis of the interview transcripts revealed that pupils' main sources of information fell into five categories: self, parents, siblings, significant others and school. However, pupils had differing access to information prior to subject choice, held differing expectations and used different kinds of arguments for and against the various subjects offered to them. This chapter will explore these differences, but also look for common factors that appear to influence the decisions of particular groups of children. The form two sample will be considered first, then a comparison will be made with data obtained from the form four sample. The material will be organized as follows:

Form two -

(a) Presentation of case studies (Jillian and John) illustrating choices typical of girls and boys, respectively, in the form two sample.

(b) Explanation of the data analysis procedures devised to enable the researcher to identify and categorize pupils' attitudes to the options as revealed by their comments on each subject.

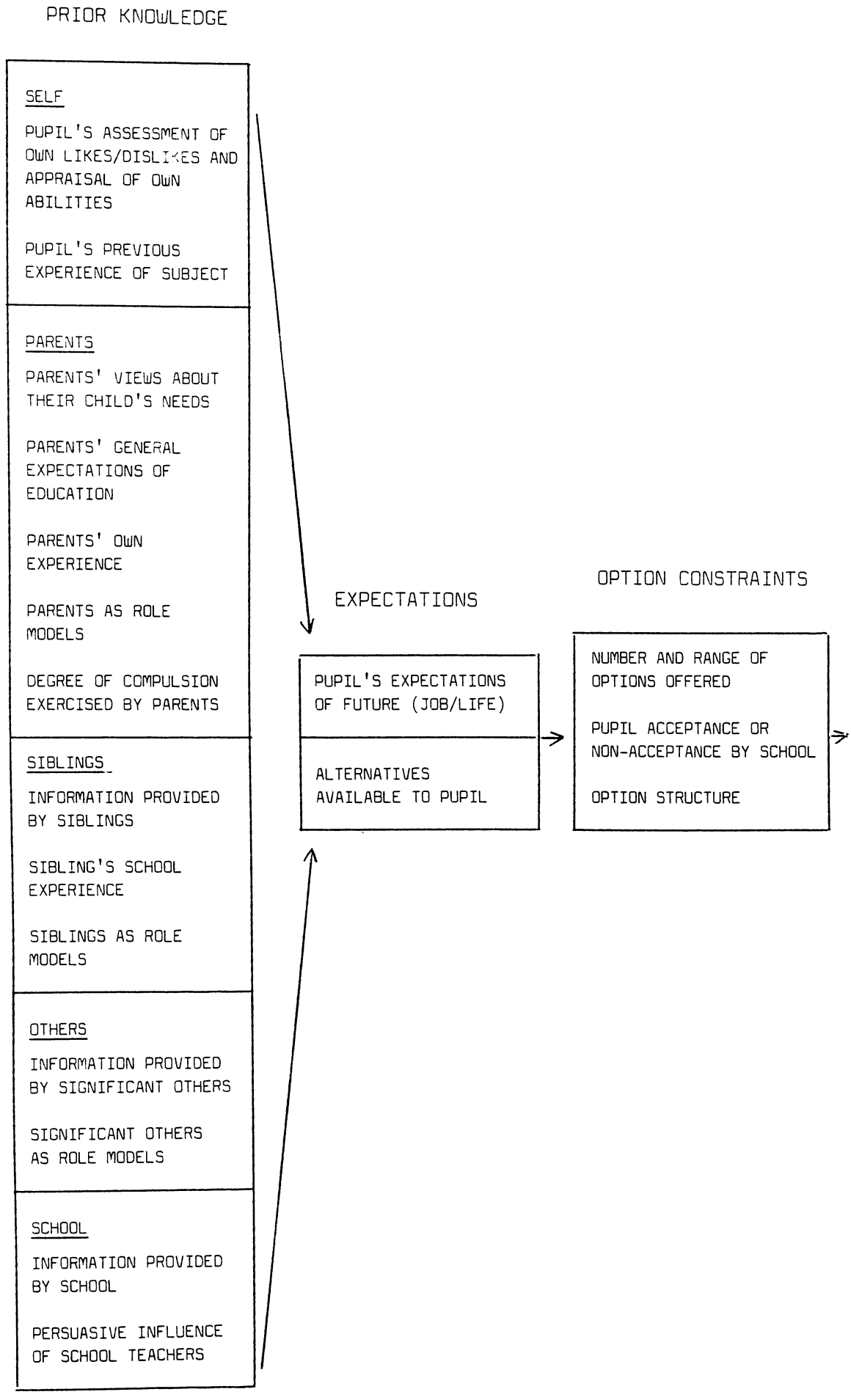


Fig. 25 INFLUENCES ON PUPILS' SUBJECT CHOICE

(c) A subject-by-subject analysis of pupils' of pupils' arguments for and against choice.

(d) A summary of the major categories developed by the form two sample to differentiate between subjects and ultimately to form the basis of choice.

Form four -

(e) Presentation of two case studies (Wiremu and Mark) to illustrate something of the diversity of experience affecting subject choice which was found in the fourth form sample.

(f) A summary of the major categories developed by the fourth form sample to differentiate between subjects, and a review of the major differences between the form two and form four samples.

7.1 Case studies: Jillian and John.

Before examining the comments made by the form two children about the optional subjects offered to them, the general process of decision making will be considered with reference to the experiences of two children whose choices were typical of those made by boys and girls at 'A' High School.

Jillian (Ax2 008g) chose economic studies and typing as her third form options and these were the two most popular choices made by girls at 'A' High School; John (Ax2 006b) chose technical drawing and metal and wood technology, the two most popular choices among boys at the school. In the brief case studies that follow, the decision making of these two children will be examined in terms of the influences summarized in Figure 25 above.

Jillian used three main types of argument in evaluating the various subjects offered. These related to how she felt about the subject, to her expectations about the possible relevance of the subject to her in the future, and to the recommendations of significant others.

She had not enjoyed her previous experience of metalwork or of clothing at intermediate school. She claimed that working with metal was 'boring', and although sewing was 'alright', she explained:

> *When you have to... make things that the teacher wants you to, like we have at school ... I don't really like it much... sometimes it's a bit boring.*

Although Jillian explained her non-choice of these subjects in terms of her previous unsatisfactory experience, she did not in fact choose art, home economics and Maori which were all subjects she said she had enjoyed at intermediate school. She gave no reason for not choosing Maori, but said that other pupils had not recommended art:

> *Everyone sort of puts you off, because they say what the teacher's like and that sort of thing.*
>
> *(Interviewer: When you say 'everyone' are you meaning people who go to the school at the moment?)*
>
> *yes, and from people who know people who have been in art classes.*

She explained that she had not chosen home economics because, although she liked cooking, she had learned from her sister that the subject also included theory which she did not think she would enjoy.

In fact, Jillian chose two subjects that she had not previously experienced, and her main arguments in favour of these were utilitarian. Of typing, she said:

> *I'll probably be a secretary or something when I grow up and typing seems to be a good subject.*

And she chose economic studies on the recommendation of others:

> *I took it because they said it's a really good subject... It's more about how to handle money and that sort of thing.*
>
> *(Interviewer: Who's 'they'?*
>
> *Oh, my brother. He takes it.*

She mentioned that her brothers and sister had given her information about the content of the subjects and had told her something about the teachers, and admitted that they had influenced her decision making, especially the decision not to take art. She also said that she had discussed the subjects with her school friends:

> *Yeah, that gets discussed. Everyone asks what they're going to be doing and that sort of thing. See, tons of people are taking economic studies, and oh, most of the girls are taking typing too.*

Asked what help her parents had given her, Jillian said:

> *They helped me, but they didn't force me to take whichever ones they wanted, and they just sort of advised me and that sort of thing.*

Thus Jillian considered the options on the basis of her own prior experience and of information given to her by others, including older siblings, as a result of their experiences. Her choice was essentially utilitarian and was strongly influenced by the recommendations of siblings and peers. This was not unexpected, given that Jillian's subject choice echoed that of the majority of girls in her year. Figure 26, p118, summarizes Jillian's personal constructs governing subject choice.

John also gave utilitarian reasons for his choices, which were metal and wood technology and technical drawing. He said of the former:

> *I'm taking that 'cos I like working with my hands. And that's what I'd like to do - a metal or woodworker.*

He felt that technical drawing would be relevant to him for the same reason:

> *That's my next one... 'cos for woodwork and that I would need how to read the plans and draw changes to them - draw things to work out.*

However, John did not refer to enjoyment of his previous experience

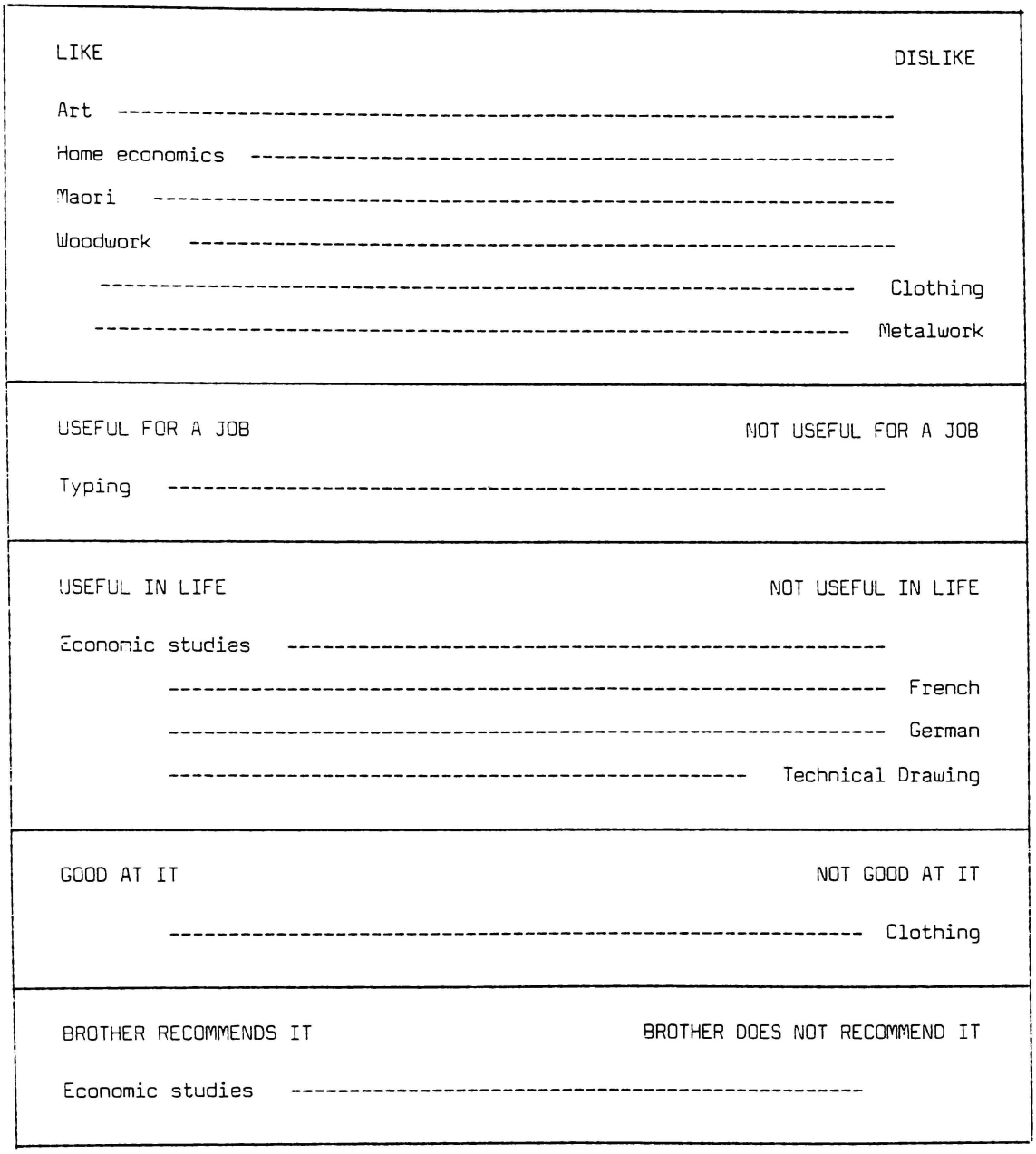


Fig. 26 JILLIAN'S PERSONAL CONSTRUCTS GOVERNING SUBJECT CHOICE

of woodwork and metalwork at intermediate school, but mentioned rôle models - his father who was a metalworker and his grandfather who was a cabinet maker.

John said that he had discussed the subjects with his parents and they had approved of his choices, but unlike Jillian, he did not believe that his friends or his older sister had influenced him. He pointed out that most of the others in his class had chosen economic studies, which he did not want to take even though his parents were keen for him to do so. He said that his sister had

told him about the subject and he did not like the sound of it. However, whether from home or from school, John had assimilated some very strong ideas about the sex appropriateness of some of the options, and these appeared to be reinforced in sewing by his lack of success. He said of clothing:

> *I didn't like it... end up sewing your fingers in it... Just seems girlish.*

And though he said he liked home economics, John went on to explain:

> *It's not really a subject I'd like to take ... it seems more girlish as well. You don't really get many men who are good cooks.*

And he used the same instrumental argument against typing:

> *Not really, 'cos usually women are typists, or more so than men.*

Thus John looked at his subject choice from a consistently utilitarian point of view and with a strong notion of what would be appropriate for a boy. The subjects he rejected were viewed in the same way, with the exception of music which he said he disliked because of all the practice that was necessary. Figure 27, p120, shows John's personal constructs governing subject choice.

Jillian and John made subject choices typical of other girls and boys enrolled at 'A' High School, and they used arguments for and against particular options that were also voiced by many of their peers. Nevertheless, it must be remembered that there was a wide range of differences between individuals.

7.2 Data analysis procedures.

The above cases show something of the kind of interview data that was available to the researcher from the 53 pupils in the form two sample. Typed transcripts ranged from three to nine pages (single spacing) and presented an unweildy mass of data. Data reduction began with summaries of comments made by each child being drawn up under appropriate headings (see Appendix F). Comments

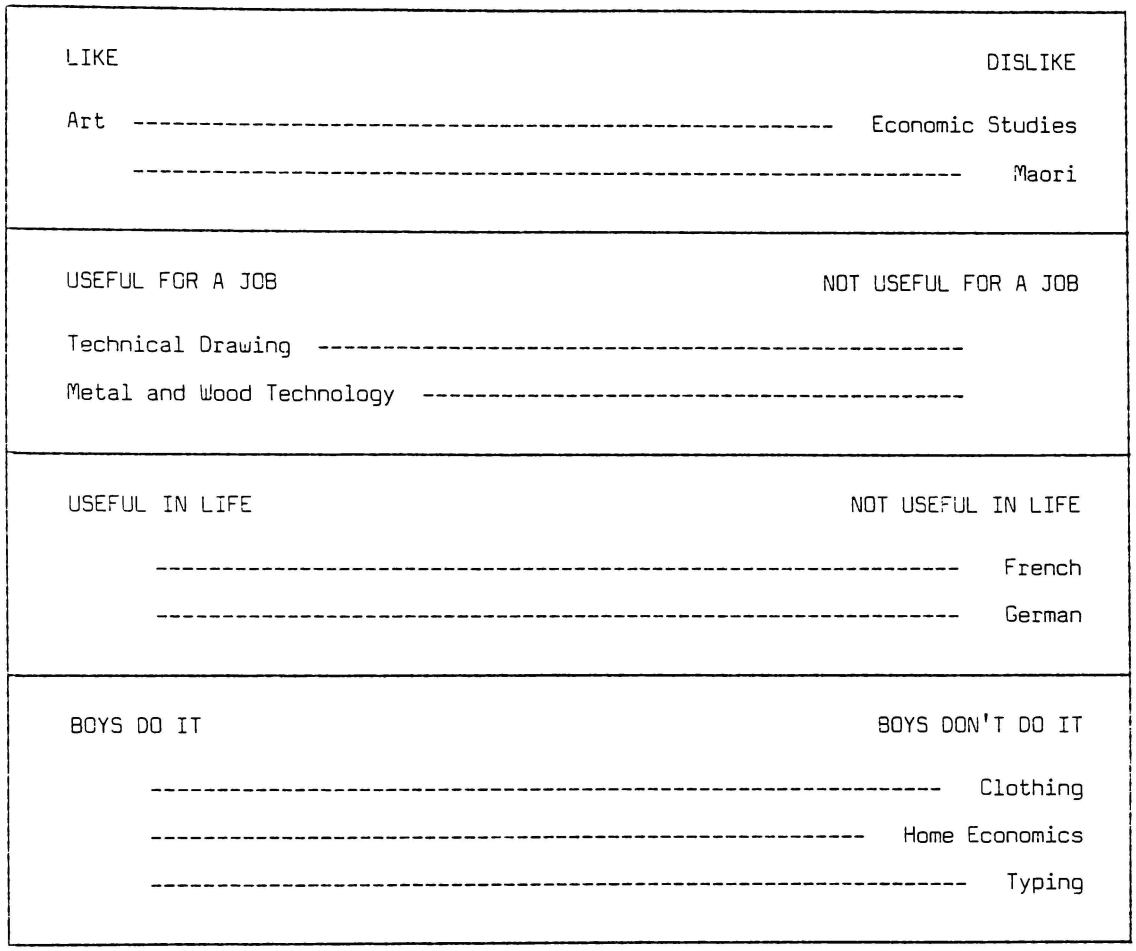


Fig. 27 JOHN'S PERSONAL CONSTRUCTS GOVERNING SUBJECT CHOICE

about each of the options were then gathered under subject headings and through a process of sorting and re-sorting a four-point classification was eventually devised. The four categories were as follows:

CATEGORY 1 - Statements suggesting a favourable attitude to the subject, with a strong likelihood of choice of the subject.

CATEGORY 2 - Statements suggesting a generally favourable attitude to the subject, but with some reservations likely to preclude choice of the subject.

CATEGORY 3 - Ambivalent statements apparently equally balanced for and against the subject, and also neutral statements suggesting that the subject

had not seriously been considered as a possible choice.

CATEGORY 4 - Statements suggesting antipathy towards the subject and/or indicating a definite decision not to choose the subject.

This four-point categorization reflacted the fact that the majority of children found some positive things to say about most of the optional subjects. There are, therefore, two positive categories (1 and 2) and one negative category (4), with category 3 being neutral. The 25 subject summaries elicited from the data are to be found in Appendix D, Volume II, but diagrammatic representations showing the percentage weightings of comments in each category for each subject are shown in figures presented in section 7.3 to follow.

It will be noted that the categorization makes the assumption that choice was equated with positive attitudes towards a subject. This was true of most pupils. In one or two instances where a pupil expressed negative attitudes but stated an intention to choose a particular subject in response to parental pressure, the comment was coded according to attitude rather than intention to choose.

7.3 Pupils' attitudes to the options - form two.

Pupils' responses to the optional subjects will be discussed in the following order:

Languages (French, German, Maori)
Technical subjects (Technical Drawing, Woodwork, Metalwork)
Home Economics and Clothing
Typing
Art
Music
Economic Studies
Environmental Studies
History

Except in the case of the last three subjects which were offered in

one school only, the responses will be considered by subject and not by school. However, references to differences between the schools will be made. It should be noted that although the subject choice of the sample groups roughly paralleled that made by the total third and fifth forms at 'A' and 'B' High Schools, there were some variations. (See Table 2, p123.) Although this should be borne in mind when generalizations are made from the samples, it does not negate the fact that children viewed the optional subjects in different ways, tended to use different criteria for selection and rejection, and tended to use different sets of criteria when choosing different options. It is therefore claimed that a subject-by-subject analysis is both valid and relevant.

7.3.1 Attitudes to languages.

Summaries of the form two children's attitudes towards languages are presented, along with the other subject summaries, in Appendix D (Volume II), while Figure 28, p124, gives a graphic representation of the same data.

Analysis of the form two transcripts showed that positive attitudes to the study of languages and likelihood of choice of language options were strongly related to views expressed in the home, particularly by the mother. Children who came from homes where French or German was spoken or where the mother recommended choice of these languages were most likely to consider language a choice. Similarly, the children most likely to consider Maori as an option were the ones whose parents held positive attitudes towards this subject. The fact that other family members could speak the language was regarded by the children as an added incentive to study because of the help they would perhaps receive at home. Children's attitudes to languages closely reflected the Ajzen / Fishbein decision making model (see p 50) in that children were strongly influenced by the attitudes of significant others, however the model was less pertinent to other subject areas.

Rejection of the language options was most likely to be expressed by pupils who saw no relevance in the study of languages to their own lives. Generally they did not quote the opinions of other family members, but gave their own views. Examples of the utilitarian argument against languages included the following:

TABLE 2 SUBJECT CHOICES AT 'A' AND 'B' HIGH SCHOOLS

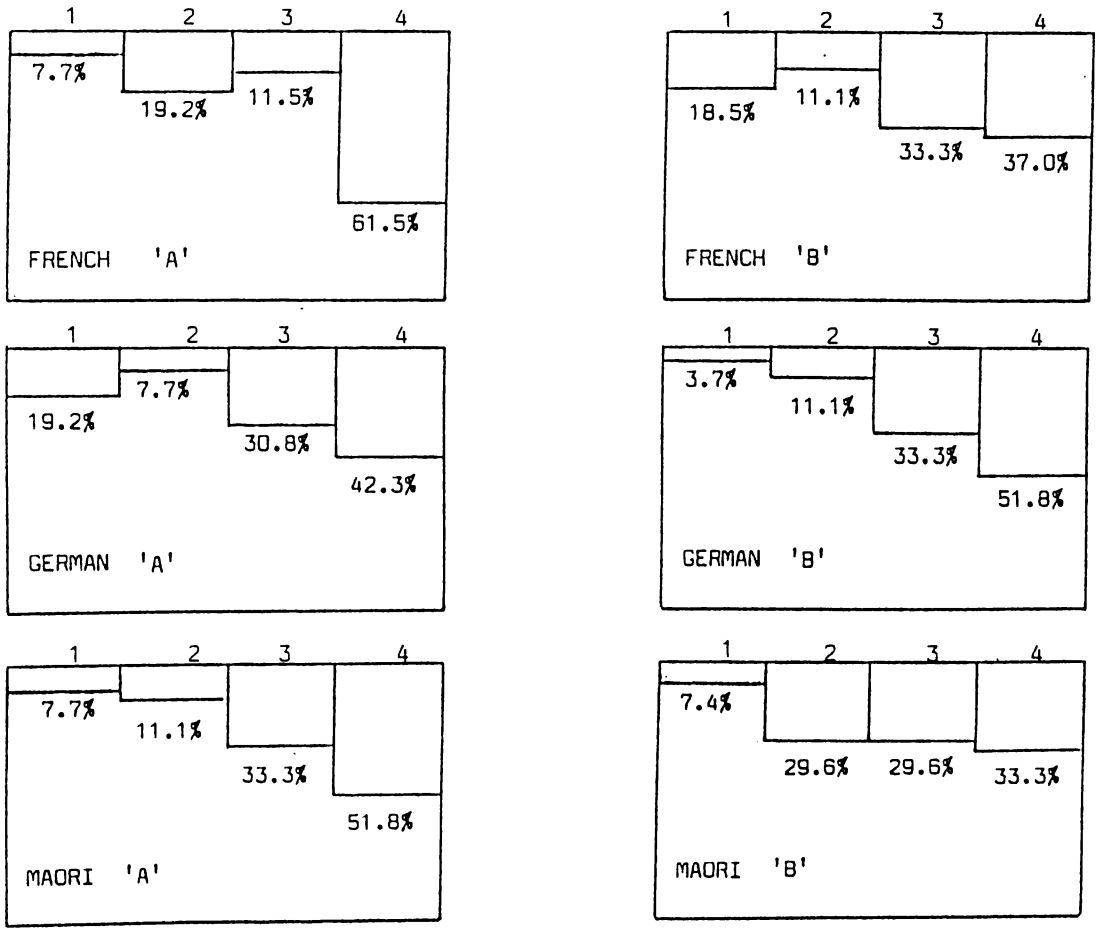
'A' HIGH SCHOOL	TOTAL BOYS	TOTAL GIRLS	TOTAL PUPILS	SAMPLE BOYS	SAMPLE GIRLS	SAMPLE TOTAL
FRENCH	7.00%	23.5%	16.00%	14.3%	16.7%	15.4%
GERMAN	12.2%	8.8%	10.1%	7.1%	16.7%	11.5%
MAORI	6.1%	11.8%	9.2%	7.1%	16.7%	11.5%
ART	20.0%	25.7%	22.3%	28.6%	8.3%	19.2%
TECHNICAL DRAWING	63.5%	11.0%	35.1%	71.4%	25.0%	50.0%
METAL AND WOOD TECH.	66.1%	2.2%	31.5%	35.7%	8.3%	23.1%
ECONOMIC STUDIES	20.0%	30.9%	25.9%	42.9%	50.0%	46.2%
TYPING	1.7%	54.4%	30.3%	0.0%	41.7%	19.2%
HOME ECONOMICS	2.6%	16.2%	10%	0.0%	16.7%	7.7%
CLOTHING	0.0%	8.1%	4.4%	0.0%	0.0%	0.0%
MUSIC	4.3%	7.4%	6.0%	0.0%	0.0%	0.0%
'B' HIGH SCHOOL	**TOTAL BOYS**	**TOTAL GIRLS**	**TOTAL PUPILS**	**SAMPLE BOYS**	**SAMPLE GIRLS**	**SAMPLE TOTAL**
FRENCH	10.4%	25.2%	17.3%	15.4%	35.7%	25.9%
GERMAN	7.3%	7.7%	7.5%	7.7%	0.0%	3.7%
MAORI	11.0%	16.8%	13.7%	7.7%	21.4%	14.8%
HISTORY	14.7%	27.3%	20.5%	7.7%	0.0%	3.7%
ENVIRONMENTAL STUDIES	52.4%	21.0%	37.8%	53.9%	35.7%	44.4%
MUSIC	8.3%	2.1%	8.1%	7.7%	7.1%	7.4%
ART	14.0%	16.8%	15.3%	0.0%	35.7%	18.5%
CLOTHING	0.0%	48.3%	22.5%	0.0%	28.6%	14.8%
HOME ECONOMICS	5.5	23.8	14.0%	0.0%	21.4%	11.1%
METALWORK	42.7%	0.0%	22.8%	61.5%	0.0%	29.6%
MUSIC	1.2%	9.1%	4.9%	0.0%	0.0%	0.0%
TECHNICAL DRAWING	76.8%	19.6%	50.2%	76.9%	35.7%	55.6%
TYPING	6.1%	73.4%	37.5%	7.7%	78.6%	44.4%
WOODWORK	56.7%	2.1%	31.3%	53.8%	0.0%	25.9%

N.B. Pupils had two choices at 'A' High School and three choices at 'B' High School

I don't reckon you need it unless you're going to France. (Ax2 005k)

(I'm) not going over to France. It's no use in New Zealand, everybody speaks English. It's not really a job unless you're an interpreter. (Ax2 006k)

Other reasons for rejection related to perceived levels of difficulty of the languages, particularly to problems of pronunciation. Generally such opinions were based on limited prior experience. However, the overwhelming rejection of French at 'A' High School by 61.5% of the 'A' sample was apparently due to unsatisfactory



KEY: CATEGORY 1 - Very positive attitude
2 - Positive with some reservations
3 - Ambivalent or neutral
4 - Negative

Fig. 28 ATTITUDES TO LANGUAGES - Categories of comment made by form two children destined for 'A' and 'B' High Schools.

experiences of the subject in form one or two. Children said, for example:

> *The class had something like sixty children in it. We never got our books marked. (Ax 002k)*

> *We just learnt words. We didn't learn to actually speak it. (Ax2 013k)*

The fact that 11 out of the 17 children in the 'A' sample who had prior experience of French chose not to continue the subject at high school because of dislike, boredom, difficulty and perceived irrelevance may perhaps have been an indictment of the language teaching they experienced. It would suggest that if languages are to be taught at all in forms one and two, then serious attention should be given to making this a positive and rewarding experience for the children, who above all, require feedback on their progress and particular emphasis on language as a means of oral communication. The summary of the 'A' sample comments given in Figure 29, p126, amply illustrates these points.

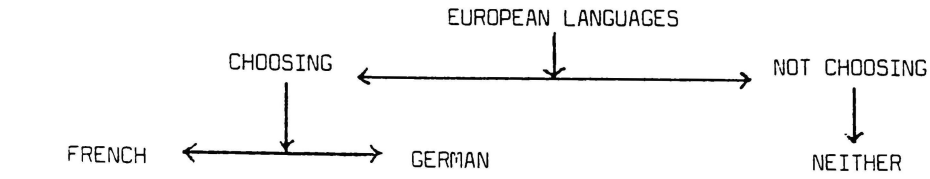
Comments made by the small sample of parents who were interviewed by the researcher supported the finding that parental attitudes were important factors affecting pupils' choice or non-choice of languages. Mrs Trent was strongly in favour of languages:

> *She's the fourth of our four daughters ... They all do well at school and I've always been most emphatic that they have a language, and French is the only one they can't pick up later and so they have all taken French. (Mrs Trent Bg)*

And even though her other daughters had not continued with their language studies, she argued:

> *If they don't start off with a language in the third form it does limit their choice later, doesn't it?... I feel anything they learn sort of broadens their outlook, doesn't it? And helps them to think... Keeps you alert and bright, hopefully. (Mrs Trent Bg)*

Mrs Green was also in favour of languages although her son had not,



*Mum said people who go to French will be good workers. My brother did that. (Ax2 002b)

Useful... not so much a main language. (Ax2 003g) (R)

*Mum knows French. She can help me.(Ax2 004g)

Some people said their French was no help in France. (Ax2 012bm)

Useful. (Ax2 016g)

Enjoy French. (Ay2 001g) (R)

*Useful. (Ay2 002g)

Mum said to take a language. It's a bit boring. (Ay2 005b)

*Languages come in handy... Thought I'd keep it going. (Ay2 006b)

Friends do it... I don't think it's as easy as French.

*A growing language ...family speaks it.

*Good to learn.

*Mum can speak it fluently.

Haven't done it.

Useful. (R)

*Hardly ever heard anything about it ...thought it'd be good to take

I'd just started French.

NOT NECESSARY:
Ax2 005b (Fr)
Ax2 006b
Ax2 008g
Ax2 014b
Ax2 017g

HARD/DIFFICULT:
Ax2 007g (Fr)
Ax2 011b (Fr)
Ax2 013b (Fr)
Ax2 019b
Ay2 003g

BORING:
Ax2 009g (Fr)
Ax2 010bm(Fr)
Ax2 015b (Fr)

CAN'T SPEAK IT:
Ax2 001g (Fr)
Ax2 018b (Fr)
Ay2 004b (Fr)

DON'T KNOW
Ay2 020gm(Fr)

N.B.
All those children who chose French as a form three option had previous experience of the subject.

11 out of 17 children who had previously studied French decided not to take it at high school.

9 out of 26 children chose a French or German option.

5 of the 9 taking French or German mentioned their mother's interest.

KEY:

* Chose this language as a form three option.

(R) Chose this language as a reserve option in form three.

(Fr) Has experience of French but did not choose it as a form three option.

Fig. 29 CHOICE OF FRENCH AND GERMAN - THE 'A' SAMPLE

in fact, chosen to take a language.

> *I think possibly a language would help at high school, but he didn't like it when he took it (at intermediate) so I wasn't going to push him into anything.*
>
> *(Interviewer: What do you mean by "help"?)*
>
> *Well, the eldest boy took it and he thought it's quite nice to have a second ... if you're going travelling or anything like that. (Mrs Green Ah)*

Mrs Ingold was surprised, but pleased, that her son had chosen to take French. She had not studied a language herself, but her elder son had taken German and her daughter had taken French. However, other parents took a strictly utilitarian view:

> *I still think maths can affect your everyday life always, as can English. Whereas I think some of the languages and that have got no bearing whatsoever. (Mrs Clive Bh)*
>
> *I never studied a language and I don't regret it. I don't see there's any particular loss in my situation, so we wouldn't have encouraged it. (Mr Keane Ah)*

Children who held positive attitudes towards the choice of a European language at high school were faced with the choice between French and German. At both high schools, French proved the most popular choice both in the samples and in the total third form groups. French was most likely to be chosen if one or more family members spoke French and if the child's prior experience had been positive. German was most likely to be chosen if it was spoken by family members, if experience with French had not been positive or if German was seen as a new or different subject that could prove interesting.

Choice of languages was open to all pupils attending 'A' High School, while at 'B' High School only the more able pupils were accepted into French and German classes, even though the two-list option system was intended to steer all pupils towards a consideration of language options. The system did appear to have resulted in a greater demand for languages at 'B' High School, but it was noted

that the fall off rate in subsequent years was much greater at 'B' than at 'A' High School. (Third and fifth form language totals can be compared in the figures presented in Chapter Five, p80, 84, 85.)

The Maori language option attracted mainly Maori pupils at both high schools. The majority of children in the form two samples were non-Maori, and most of these saw the study of Maori language and culture as not necessary, not interesting or enjoyable, and as being difficult. Those expressing some positive attitudes mentioned their previous experience of the subject and said that they had liked some aspects only, that they felt they already knew enough, or that they could learn it somewhere else if they really wanted to. This aspect of the context of learning was found to be an important reason for non-choice of a number of subjects. It was particularly used to justify choice of one option rather than another and was particularly evident in children's comments about music.

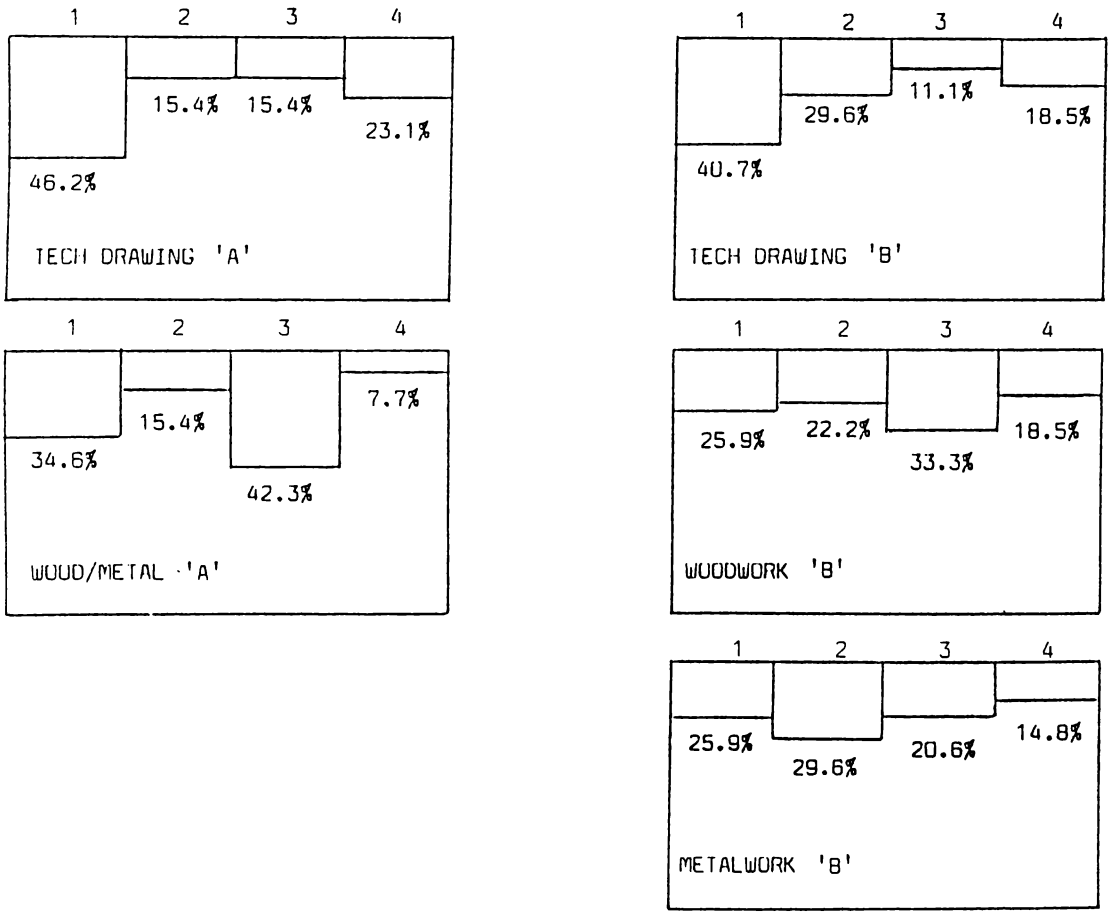
It is possible that children's experience of Maori language and culture in forms one and two was piecemeal and superficial, as was suggested by some of their comments. Generally they did not have any understanding of Maori as being an important and integral part of a bi-cultural society unless they were themselves Maori or part Maori. This pointed to the probability that positive attitudes to Maori were promoted in the home rather than by primary and intermediate school teachers. Now that the concept of taha Maori (a Maori dimension) has been adopted by the New Zealand Department of Education it would seem that its successful promotion across the curriculum can only be achieved by changing the attitudes of teachers. In addition, it is likely that public education programmes will be necessary. Comments from parents (discussed in Chapter Eleven) suggested that pakeha parents could be antagonistic towards the idea of compulsory exposure of their children to Maori at secondary school level.

7.3.2 Attitudes to technical subjects.

Technical subjects included technical drawing at both high schools, woodwork and metalwork offered as separate subjects in the list two option at 'B' High School, and the combined subject of metal and wood technology at 'A' High School. Figure 30, p129,

shows the percentage weightings of children's attitudes to these two subjects at the two high schools.

Technical subjects were chosen predominantly by boys, but technical drawing was taken my more girls than either metalwork or woodwork. (See Figures 12 and 13, p80.) Access to information about technical drawing was an important aspect of choice as this was a subject not previously experienced by children at school.



KEY: CATEGORY 1 - Very positive attitude
2 - Positive with some reservations
3 - Ambivalent or neutral
4 - Negative

Fig. 30 ATTITUDES TO TECHNICAL SUBJECTS - Categories of comment made by form two children destined for 'A' and 'B' High Schools.

Fathers, mothers, older siblings, other relatives and friends were all mentioned as having supplied information about the subject. In addition, some of the 'B' sample mentioned the technical display at the school's open evening.

Children expressing positive attitudes towards technical drawing at the initial interviews did so for several reasons. The majority claimed to like the activities involved. For example:

> *I really like sketching and I like using rulers and things like this, trying to draw things. (Bx2 016k)*

Eleven out of the total of 23 positive comments made by the total form two sample specifically mentioned 'liking', and a further two comments referred to others liking the subject. One boy said:

> *My cousin took it and he liked it, and the girl down the road took it and she liked it. (Bx2 004k)*

Six of the most positive comments mentioned technical drawing as being a useful subject, and three of these referred to possible occupational relevance. Three children thought they would be good at the subject and a further two comments related to the challenge of the subject and the excitement of learning new skills.

Technical drawing was rejected for a variety of reasons but seven of the eleven negative comments referred to the activity of drawing which children said they did not like or considered boring. Three children were influenced by brothers or friends who did not like the subject, and two said they were not good at drawing, although one admitted:

> *My brother said you don't need to be really. (Ax2 002k)*

Two more thought that the subject would only be useful to them if they wanted to become architects. Another said:

> *My dad does that... He teaches me that. (Ax2 017g)*

Thus, in general, children's arguments against technical drawing were the opposite of arguments used in support of the subject, In choosing or not choosing technical drawing the children were most influenced by whether they felt they would enjoy or not enjoy the activity, by whether they saw the subject as relevant (to other subjects, to everyday life, or to a career), and by whether they had been influenced by others who had enjoyed or not enjoyed the subject.

Positive comments about woodwork and metalwork were made mainly by boys. Only one girl from the 'B' sample showed an interest, but even she seemed to feel that metalwork was a boys' subject:

> *That's one of the subjects I wanna take, but Dad says it's not really useful in a way for a girl, so I dunno... I probably will take it... I like working with my hands and I'm a bit of a tomboy, and I like doing boys' stuff and that. (Bx2 007k)*

Eventually, on the insistence of her father, this girl nominated typing instead of metalwork. Of the two girls who spoke positively of the combined subject at 'A' High School, one had listed it as her first reserve and the other chose the subject. The problems she encountered as a result of being the only girl in her class are related in the case study of Karen, presented in Chapter Nine.

Most boys who chose woodwork, metalwork or the combined subject mentioned their manual training experience, and choice of one or other subject was largely related to enjoyment of the activity, for example:

> *I like working with my hands. (Ax2 006k)*
>
> *I enjoy doing woodwork 'cos it's a lot of fun carving... cutting down to shape ... just making everything the way you wanna. (Bx2 006k)*

Twenty of the 23 positive comments mentioned liking, enjoyment or satisfaction, and choice of one subject rather than the other was related to doing well or getting high marks and to the type of articles made. A boy who chose woodwork said:

I think you get more satisfaction out of making a wood thing which you can colour and you can varnish. (Bx2 006k)

The novelty argument used by boys who had not experienced metalwork, was used both for and against the subject. One said:

I've been doing woodwork at manual and I'm gonna stick with woodwork. (Bz2 005k)

But another explained:

I'm taking (metalwork) because we've already learnt woodwork at manual... I wanted to learn about woodwork too, but I've already done that so I don't really need to. ((By2 004k)

Because most children had previous experience of the workshop subjects, they tended not to refer to the experience of older siblings. However, one boy mentioned the articles his brother had made . Interestingly, only one of the boys who chose a workshop subject mentioned occupational relevance.

Many of the children who rejected one or other subject at 'B' High School had taken the Head of Department's advice to pair technical drawing with one of the workshop subjects. Because only two choices were allowed from option list two, pupils at this school were not able to take all three technical subjects. At 'A' High School, however, choice or rejection related to both woodwork and metalwork because the subjects were paired. Only two children completely rejected the combined subject because they did not like or enjoy the activities. Many others expressed liking, but said they preferred other subjects or had not been successful in the past. One boy rejected the subject for organizational reasons:

I enjoy that, but people told me too many people are in the classes. It's always crowded and lots of people's work gets pinched. (Ax2 018k)

His mother, who was among the parent sample interviewed, elaborated on why her son had not chosen metal and wood technology:

It was possibly because the other two (his older brothers)... both had a bit of bad luck and lost what they'd made in woodwork - you know, to spend all year on woodwork and then lose it.
(Mrs Green Ab)

Four of the girls in the total form two sample mentioned woodwork or metalwork as being boys' subjects. One of them said:

My brother took metalwork and he made lots of things - thought it was really good - except I don't think it's for me. It's a sort of boys' subject and that, eh?
(Bz2 004g)

Two others said they were not good at woodwork:

I go wrong everywhere and things like that.
(By2 005g)

I keep cutting myself. I carve the wrong things. I'm absolutely hopeless at it.
(Ax2 001g)

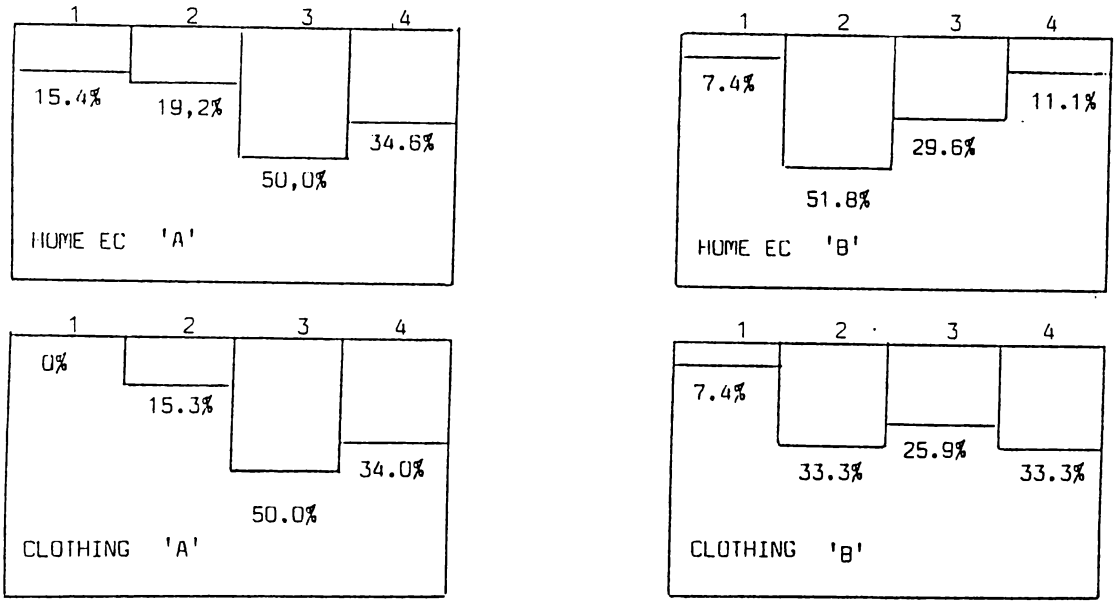
And others did not see what use the subject could be to them, or felt they already had enough. This latter point was one used in connection with the other manual subjects, clothing and cookery.

In summary, technical subjects were taken mainly by boys, although a significant number of girls chose technical drawing. Generally, the subjects were chosen for their enjoyable practical content which was seen as of value to boys, but less so to girls.

Most children were able to refer to prior experience of woodwork and metalwork when making their choices, but had to refer to information from parents, older siblings and friends when considering technical drawing. Boys generally reported that parents had allowed them to make up their own minds about the technical subjects. However, two girls reported strong disapproval from their parents about the possibility of their taking workshop subjects, while one girl was given strong parental support in her atypical choice. Some girls considered the workshop subjects to be boys' subjects and one boy was put off metal and wood technology by his brothers' negative experiences.

7.3.3 Attitudes to home economics and clothing.

These subjects were chosen almost exclusively by girls in the sample, and home economics proved the more popular subject; in fact, none of the 'A' sample chose to take clothing. Figure 31 below, shows the distribution of comments on the 1-4 attitude scale for the two subjects.



KEY: CATEGORY 1 - Very positive attitude
2 - Positive with some reservations
3 - Ambivalent or neutral
4 - Negative

Fig. 31 ATTITUDES TO HOME ECONOMICS AND CLOTHING
Categories of comment made by form two children destined for 'A' and 'B' High Schools.

The relative weighting of categories of comment made by children in the 'A' sample about home economics roughly paralleled the weighting given to the same children's comments about clothing, and the same was found for the 'B' sample. However, there were differences between the two samples which may perhaps be attributed to previous experience. Comments about the two subjects made by the 'B' sample were generally more positive, with 59.2% in categories 1 and 2 for home economics and 37.7% in these categories for clothing, although indications at the initial interview were that only 7.4% of the 'B' sample would, in fact, choose each subject.

Children in the 'A' sample were in general less approving of both subjects, even though 15.4% of them chose home economics.

Reference to the context of learning was made with respect to both clothing and home economics by children who chose not to take these subjects in form three. A number said that they could learn at home, although night classes and books were also mentioned as sources of information about the subjects:

> *I think (cooking's) more fun to learn at home, and I think you learn things you wouldn't learn at school. (Bz2 003g)*
>
> *Mum said I could learn (cooking) at home and there's plenty of books on it. (By2 003g)*
>
> *If you want that skill... there's untold sewing classes when you've left school - night classes and things. (Bx2 012g)*

Some felt that they would actually learn better at home:

> *My mum helps me a lot when we make things (clothing)... not like (teacher) who explains it and tells you how to do it... my mum <u>shows</u> me how to do it. (Bx2 013g)*
>
> *I like to go at my own pace and figure it out for myself rather than being told, and I like to have someone (mother) to fall back on if I do it wrong. (Bx2 005g)*

Some children said that they already knew enough about the subjects for their future needs:

> *With manual and that... I find that's enough... As long as I know how to sew and that... I'm alright if I flat by myself. (By2 002k)*

Others who chose not to take these subjects said they would not lead to a job:

> *(Cooking is) not really a thing I can follow for a job. (Ax2 011k)*
>
> *I didn't take it... because if you're going to get a job, I doubt if cooking's going to be very popular. (Ax2 007g)*

In a way I like sewing... I wouldn't like to take it as a subject... It's not a working subject. (Ax2 011k)

Several children mentioned dissatisfaction with their previous school experience, often for organizational reasons such as group size, and a number expressed dislike of the subjects or implied that they had not been successful in them in the past:

I don't like (cooking) either. I always seem to make a mess of it anyway. (Ay2 002g)

This year... I didn't take sewing... kept on making fumble things. (Ay2 004k)

And there was evidence that some boys felt that these were girls' subjects:

I didn't like it - end up sewing your fingers in it. Just seems girlish. (Ax2 006k)

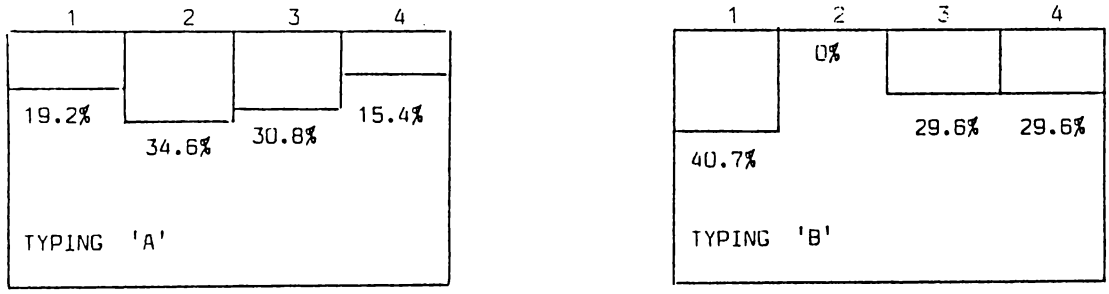
I'll get married and I'll get my wife to do all that. (Ax2 010k)

In summary, there was a general reluctance among the form two children to take home economics and clothing at school. Although children showed more interest in home economics, they felt that they could learn the skills they needed at home, or that they already had sufficient knowledge in these areas. Possibly because only two or three choices were available, these subjects were not seriously considered by most children. The fact that no boys showed an interest in taking either of these subjects at the third form level is attributed to the strong pull of technical subjects and a feeling that clothing and home economics were not appropriate choices for boys.

7.3.4 Attitudes to typing.

Typing was chosen exclusively by girls in the form two sample and was the major choice of girls at both high schools. At 'A' High School 54.4% of all third form girls took the subject while at 'B' High School 73.4% of all third form girls took typing.

Figures for boys were 1.7% and 6.1% of the total third form at 'A' and 'B' High Schools respectively. The higher figures, particularly for girls at 'B' High School, are attributed to the two-list option structure at this school which required pupils to choose two subjects from list two. It has already been noted that many girls were not keen to take home economics or clothing as options and that girls were not encouraged to take workshop subjects at this school. Figure 32 , below, shows the categories of comment with respect to typing made by children in the 'A' and 'B' samples.



KEY: CATEGORY 1 - Very positive attitude
2 - Positive with some reservations
3 - Ambivalent or neutral
4 - Negative

Fig. 32 ATTITUDES TO TYPING - Categories of comment made by form two children destined for 'A' and 'B' High Schools.

The majority of girls in the sample who said they had chosen, or were likely to choose typing, saw it as offering a potential job skill:

> *I enjoy typing and I think if I'm gonna be a secretary it would help me a lot. (Bz2 006g)*

> *I'd like to be able to type. It'd be easy to get a job - easier. (Ax2 001g)*

Some of them referred to sisters' experience or said that their mother had encouraged them in the choice. One girl mentioned her sister's expertise as a reason for not choosing typing at school:

Among the boys, some could see value in typing, but not as a school subject:

> *I like typing. I always liked typing stories and things out. (Ay2 004h)*

Others felt it was not relevant to them or was a girls' subject:

> *I don't think I need to learn it at all. I don't think I'm going to be a typist. I don't need to type. (Bx2 006h)*

> *Not really, 'cos usually women are typists - more so than men. I don't really care for that sort of thing. ((Ax2 006h)*

Two boys were aware of the possible value of typing skills in computing, and one was considering the subject. The other said:

> *My mum said I wouldn't really need it. The only thing I could use it for is computers, but I don't think I'll go into that. (By2 004h)*

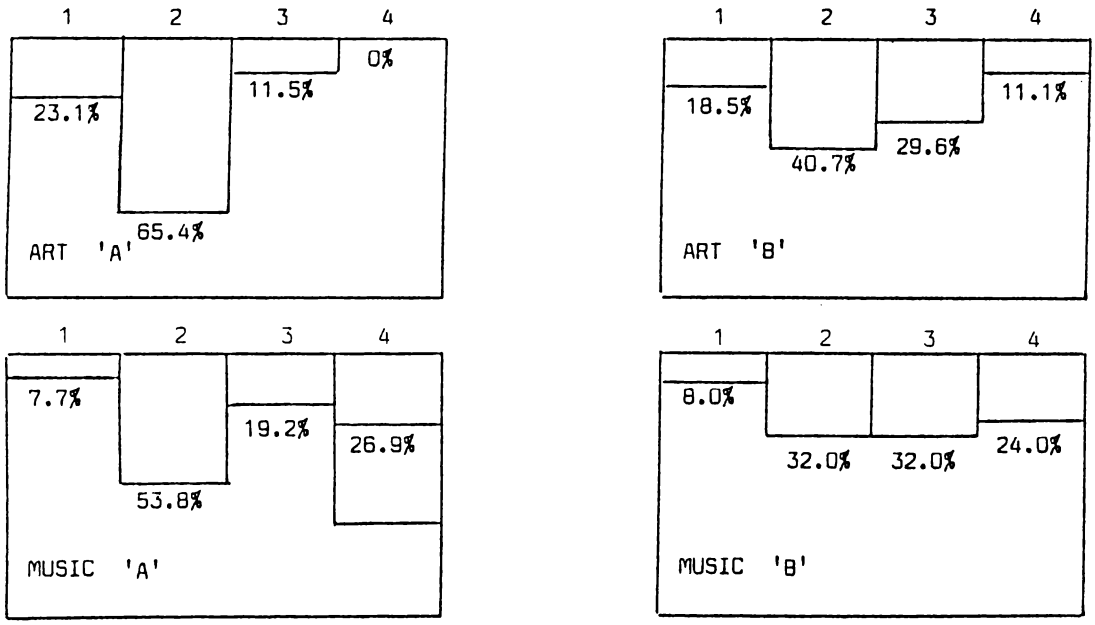
Over all, the reasons given by pupils for choice or non-choice of typing followed traditional arguments concerning its appropriateness for girls as a potential job skill, but not for boys. There was no apparent awareness of the New Zealand Vocational Guidance Council's prognostications that jobs for typists, per se, are expected to decline in numbers quite drastically in the forseeable future, but that increasing computerization in the work place may require both men and women to have basic keyboarding skills.

7.3.5 Attitudes to art and music.

Choice of art and music as options was related to pupils' interests and abilities. All of the children choosing these subjects mentioned personal satisfaction gained through the activities of art or music, although those choosing art did not always claim to be 'good' at it.

Music has been chosen as the subject for a special case study presented in Chapter Ten, but it is important to mention at this

point that the majority of children who expressed an interest in and enjoyment of music, did not choose to take it as an optional subject. Attitudinal weightings of the sample groups are shown in Figure 33 below. Music was thus the major subject for which pupils claimed school was not the most appropriate context of learning. Pupils claimed that music was available to them through private music teachers, through itinerant instrumental teachers visiting schools, and through choirs, bands and orchestras available to them both in the community and in the extra-curricula programmes offered by the school. Many therefore preferred to choose optional subjects that were not available elsewhere.



KEY: CATEGORY 1 - Very positive attitude
2 - Positive with some reservations
3 - Ambivalent or neutral
4 - Negative

Fig. 33 ATTITUDES TO ART AND MUSIC - Categories of comment made by form two children destined for 'A' and 'B' High Schools.

Form two pupils, particularly in the 'A' sample, also expressed positive comments about art, though many of them chose not to take it as an option. This was despite the fact that 'A'

High School did not offer a core art programme such as the one offered at 'B' High School. While claiming to enjoy art activities which were regarded as a change from usual classroom work, many of the 'A' sample felt they were 'not very good'. One said:

> *I like art... I'm not very good at it ... that's probably the main reason why I didn't choose it. (Ax2 020gm)*

Although another felt that:

> *If you're really a bright person you can easily go into that if you've got a skilled hand... it's relaxing... you don't have to think... It's not such a hard subject. (Ax2 016g)*

Overwhelmingly the 'A' sample claimed to enjoy art, but the criterion used by those who chose the subject was that they were 'good at it'. Only one boy used an instrumental argument against art. He said:

> *It won't get me anywhere. I'm gonna be a farmer. (Ax2 015k)*

Most of the children in the 'B' sample also professed to enjoy art, and again the difference between those who chose the subject and those who did not was perceived ability in art. In this sample, however, two children said they did not need to choose art as they already had art in the core, three said they preferred other subjects, and several suggested that their attitudes to art would vary according to what they were asked to do. One said:

> *Depends what it is. I don't like art that much unless we're doing cartoons or making up your own drawings instead of doing what they say. (Bx2 011km)*

In summary, most pupils who expressed an interest in music did not choose to take it as a school option mainly because they felt they had other means of access to music. Thus arguments using the criterion of context of learning were important in this subject area.

Only a small minority of children expressed negative attitudes towards art, but the distinguishing factor between those choosing

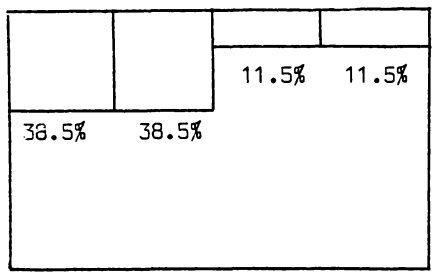
and not choosing the subject was perceived ability.

Neither music nor art was perceived by any of the children as being relevant to a future occupation or as offering skills that would be useful in everyday life.

7.3.6 Attitudes to economic studies.

This subject was offered as an option only at 'A' High School because at 'B' High School it had been established as part of the fourth form core.

Pupils in the 'A' sample were very positive about economic studies when interviewed in form two. Most of those whose comments were classified in category two had chosen the subject as their first reserve and none of these expressed doubts as to the value of the subject even though they had chosen two others ahead of it. Figure 34 below, shows the percentage weightings in each category of comment made by the 'A' sample.



KEY: CATEGORY 1 - Very positive attitude
2 - Positive attitude (but not choosing)
3 - Ambivalent or neutral
4 - Negative

Fig. 34 ATTITUDES TO ECONOMIC STUDIES - Categories of comment made by children destined for 'A' High School.

It was clear that parents and older siblings were important sources of information about economic studies because these sources were specifically mentioned by 42.2% of the sample. Three of the

26 children showed by their comments (made after they had formalized their choices) that they knew little, if anything, about the subject:

> *I chose that for my third (reserve). I don't know much about it. Mum told me to take it. (Ax2 019k)*

> *I like economic studies. I like learning things like that... like temperatures and stuff... weather. It was in our prospectus or something... I've forgotten what it is, but I'm taking it as my third choice. (Ay2 003g)*

> *What's economic studies? (Ax2 010km)*

The children's reasons for choosing economic studies were almost wholly utilitarian. The subject was seen as providing useful skills for everyday living, for example:

> *It's a good one 'cos you need it today. When you get a home you'll have to deal with money. (Ax2 012km)*

And some felt it would be useful to them in a future occupation:

> *I took that... it's for my job. I want to be a manager of some kind of firm. (Ax2 016g)*

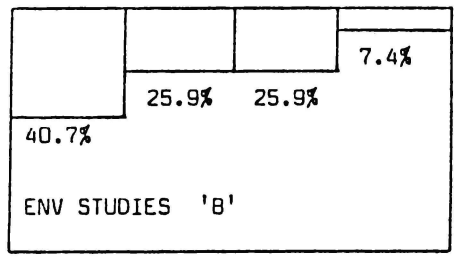
It is possible that the parents' strong opinions about the utilitarian value of economic studies influenced children towards considering this subject rather than others, despite the fact that unlike such subjects as languages and technical drawing which build on previous years' work, economic studies (or senior economics) can be picked up at any level.

In summary, it was found that children were persuaded to take economic studies generally as a result of favourable comments expressed by parents and older siblings. Reasons for their choice were strongly utilitarian.

7.3.7 Attitudes to environmental studies.

This subject was offered only at 'B' High School in the first option list along with languages, music and history. Reference has

already been made to this subject in Chapter Five, which dealt with the constraints of the option system. It was noted there that a significant demand for environmental studies, particularly among boys, appeared to have been partly due to the fact that it was offered as an alternative to languages, as well as to the fact that it was actively promoted by the Head of Department. It can be seen from Figure 35 below, that 66.6% of the 'B' sample spoke positively about environmental studies, and that 40.7% indicated their intention to take it in form three.



KEY: CATEGORY 1 - Very positive attitude
2 - Positive with some reservations
3 - Ambivalent or neutral
4 - Negative

Fig. 35 ATTITUDES TO ENVIRONMENTAL STUDIES - Categories of comment made by children destined for 'B' High School.

Most of those who said they were taking environmental studies said that it had been recommended to them by parents or older siblings and/or the subject sounded interesting. One boy said, for example:

> *I've taken that because my sister said it was a good subject. She's taken it, so I've decided to. (Bz2 001k)*

Only one child verbalized the fact that he was taking the subject because it was the best available in list one:

> *This is the one I thought of taking, mainly because I don't want to take the others. (Bx2 016k)*

There was a good deal of variation between the stated expectations of the children as far as the content of environmental studies was concerned:

> *I think I'll like it... I like trees, insects and stuff like that. (By2 005g)*
>
> *Mum's told me it's on people and there's experiments through it... and I like that. (Bz2 003g)*
>
> *I think quite a lot about pollution and that... so I think I'll take that. (Bx2 007k)*
>
> *That's one of the things I want to take next year, 'cos it's like science and that, and I want to do science sort of stuff. (Bx2 008g)*

Expectations that the subject would be about trees, insects and people did not seem justified in the light of information given in the school prospectus which explained that the subject covered "the processes and character of the environment" and included such topics as topographical maps, climatology, the water cycle and the oceans.

It is worth noting that environmental studies, despite its popularity, was in no case claimed to be a useful subject. Thus, when the choice of environmental studies at school 'B' is compared to the choice of economic studies at school 'A', for example, it is quite clear that pupils used different criteria to choose the different subjects.

Only two of the 27 children in the 'B' sample rejected environmental studies, both for reasons of content. Thus in this subject pupils were choosing or not choosing on the basis of what they perceived the subject content to be.

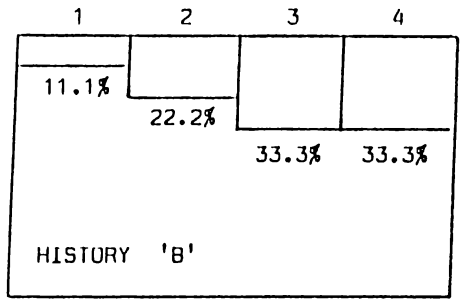
7.3.8 Attitudes to history.

This was another of the options offered only at 'B' High School in option list one in competition with languages, music and environmental studies. Figure 36, p145, shows the category weightings of the 'B' sample when interviewed about history. However, although three pupils indicated when interviewed that

they were going to choose history, in the event only one did so. She claimed:

> *It's really interesting... I think it helps people to understand how we are today and what happened beforehand. (Bx2 012g)*

For others, history was second to environmental studies if they wished to avoid taking a language and if they had no musical background.



KEY: CATEGORY 1 - Very positive attitude
2 - Positive with some reservations
3 - Ambivalent or neutral
4 - Negative

Fig. 36 ATTITUDES TO HISTORY - Categories of comment made by children destined for 'B' High School.

There were two major objections to history, each mentioned by several children. One related to the problem of having to remember things, especially dates:

> *I'm hopeless at it! I can hardly remember anything. (Bx2 006l)*
>
> *Mum said one of the disadvantages was you gotta remember all the dates. (By2 003g)*

The other reflected the children's feeling that history was about the past and therefore no longer relevant:

I'm not really interested too much in history because it's all sort of gone, and it's not going to be too much use later. (By2 004k)

Apart from these considerations, major reasons for positive or negative attitudes to history appeared to be the children's perceived liklihood of enjoying or not enjoying the subject. One girl based her negative comments on previous experience. She said:

We sort of did the history of (our area) ... It seemed quite boring. I didn't enjoy it at all. (Bz2 006g)

And none of the children mentioned that history was a subject that could be picked up at higher levels in the school without previous experience.

It should perhaps be noted here that an appreciation of history is dependent on a pupil's level of cognitive development as it requires an inderstanding of the concept of passage of time. The fact that not all form two and three children had fully developed this concept was one of the reasons given for the introduction of social studies in New Zealand to replace history and geography in the junior forms. No attempt was made by the present researcher to gauge the level of intellectual functioning of the children in the study, but it must be recognised that this could have some bearing on their attitudes to a subject such as history

7.3.9 Summary and conclusions.

For subjects offered at both 'A' and 'B' High Schools there was generally close agreement in the relative weightings of categories of comment made by the two sample groups. Exceptions seemed to be attributable to the children's form one or two experience of a subject. For example, the negative attitudes towards French among the 'A' sample stemmed largely from negative experiences of the subject at intermediate school.

There were definite sex differences in subject choice which seemed to be due to the children's own ideas on each subject's relevance to the sexes, reinforced in some cases by parents' views.

Generally, the choices made by boys at this level were more narrowly defined as appropriate for their sex than were the choices made by girls.

Some subjects proved much more popular than others, but children did not use consistent criteria when making their choices. For example, economic studies was chosen by a large number of the 'A' sample children for its practical value in everyday life and possible job potential; technical drawing was chosen largely because its content was perceived as enjoyable. Thus children used different criteria in evaluating the different subjects offered to them as options.

7.4 Criteria used in choosing subjects - form two.

Although, as it has just been noted, children used different criteria when evaluating different subjects, it was felt that an analysis of the criteria used across all subjects could prove useful in shedding further light on the process of decision making. The method of analysis and the findings will be presented in the following sections.

7.4.1 Data analysis.

The first stage of the categorization entailed putting the comments under three broad headings: positive, neutral and negative. This was done from the original transcripts rather than from the summaries of comments under subject headings. In the second stage comments were sorted into sub-categories under the positive and negative headings. It was found (as already indicated in the subject analyses) that there were some differences in the categories of comment under the posive and negative headings, showing that in some instances children were using different types of argument for choosing and for not choosing subjects. The classification elicited from the data was as follows:

POSITIVE:
- How I feel about the subject
- Subject utility
- Others' views
- Special factors

NEUTRAL

NEGATIVE: How I feel about the subject
Subject utility
Others' views
Context of learning
School variables

It will be seen that the first two categories under both positive and negative headings broadly relate to the two main criteria identified by Woods (1979), namely, affective and utilitarian. The third category, others' views, lends support to the Ajzen /Fishbein (1969) decision-making model which stresses the importance of the views of significant others in influencing an individual's decision to behave in a particular way. The fourth category of positive comment was concerned with special factors that pupils saw in a positive light, such as having a typewriter at home to practise on, or having an older brother or sister who would be able to give assistance at home.

Neutral comments included all those that suggested pupils neither liked nor disliked the subject and did not consider taking it as an option.

Among the negative comments was a category that did not appear as an argument in favour of any subject. This was the context of learning. This criterion, hinted at in the pilot study for the present research but not encountered by the researcher in previous studies, was most evident in children's discussions of home economics, clothing and music, which were all subjects that some children felt they could learn elsewhere. The final category of negative comment, school variables, showed that pupils quoted the comments of older friends or siblings, for example, about the teachers, as reasons for not taking a subject. Since no school variables category appeared among the positive comments, it is hypothesised that children internalized positive comments made by their friends and made comments such as 'that's a good subject' instead of quoting their sources.

Figure 37, p149, lists the major categories outlined above, together with the 56 sub-categories used by children in the form two samples to differentiate between the subjects offered to them.

POSITIVE COMMENTS:

HOW I FEEL ABOUT THE SUBJECT -

I like/enjoy it, am interested, have fun
I find it challenging.
I do well at it
I do well at it
I can learn new skills
I'll have scope for individuality/ own choice
The subjet has variety
It makes a change from other subjects
My previous experience was good

SUBJECT UTILITY -

It has special relevance to me
It's useful in everyday life
It's useful in a job
It's useful in my chosen job
You make useful things
Everyone should do it
All girls need it

OTHERS' VIEWS -

Mother has done it
Mother recommends it
Father has done it
Father recommends it
Brother/sister recommends it
Others recommend it
Parents think I'm good at it

SPECIAL FACTORS -

I can practise at home
Someone at home can help me

NEUTRAL COMMENTS:

I already know enough
I didn't consider it
I've never experienced it
I don't know much/anything about it
I prefer something else

NEGATIVE COMMENTS:

HOW I FEEL ABOUT THE SUBJECT -

I don't like it, find it uninteresting/ boring.
It's hard/difficult
It's too easy
I'm not good at it, can't do it
I get impatient/frustrated with it
You don't do what I'd expect in it
You have to do what the teacher decides
It takes too long to finish things
There's too much work/homework
My previous experience was not good

SUBJECT UTILITY -

It's not relevant to me / not necessary
You don't make useful things
It's not useful in a job
It's not useful in my chosen job
Boys/girls don't do it

OTHERS' VIEWS -

Mother and/or Father doesn't recommend
Mother and/or father doesn't recommend
Brother/sister doesn't recommend
Others don't recommend it
Family/friends haven't found it useful

CONTEXT OF LEARNING -

It's already in the core
Mother/father can teach me
I can learn somewhere else
I can teach myself

SCHOOL VARIABLES -

Classes are too big
Work gets taken
I wouldn't get in the class

Fig. 37 CRITERIA USED BY FORM TWO CHILDREN TO DIFFERENTIATE BETWEEN THE OPTIONAL SUBJECTS OFFERED TO THEM

7.5 Case studies: Wiremu and Mark.

The case studies of Wiremu and Mark presented in this section are included, not because they illustrate typical fourth formers' choices, but because these interviews showed something of the range of needs and expectations encountered among fourth formers.

Wiremu (B4 005bm) and Mark (B4 004b) both attended 'B' High School. Wiremu's comments have been included to show that even though fourth formers in general knew a good deal about the options oftered to them and were able to make reasoned choices, there were still some pupils who were uninformed and even a little confused. Mark's comments have been included to show how a pupil with strong ideas about what he wants out of schooling has been influenced by the expectations of teachers and peers.

Wiremu had been placed in one of the 'B' High School fourth form classes described as 'lower average' by teachers. He said that English was 'easy' and that maths was 'O.K.' but he did not like it very much. In science, he seemed a little confused:

> *Science is O.K. Gets a bit boring. We do all these experiments and then after a while you forget that experiment, you know. You just get lost. You think you've done it before but, you know, you're not quite sure.*

As Wiremu was a Maori pupil, it could perhaps be expected that he would be particularly positive about his Maori studies. However, he said:

> *I don't like it. I've learnt nothing all this year... You know, it's hard to understand.*

His problems may well have stemmed from the absence of a sound background in the subject because he mentioned having previously attended two other secondary schools before coming to 'B' High School.

Wiremu said that he was going to take cooking in form five, but was confused by the similarity of names between home economics and economic studies. He said:

That's cooking, eh?... Yeah, that's where I was getting confused... Yeah, I'm cook.

(Interviewer: You're going to do cooking? Why?)

'Cos I'm hoping to go to university - oh, Tech., yeah - as a, apprentice, and um, get a flat, flat with someone, and that could come in.

He said he knew about history and had not chosen it, but he did not consider geography. He said:

I didn't really know (what it was). Isn't that - got to do with graphs and all that?

Wiremu said he had received no help from his parents in making his fifth form subject choice, and only one teacher spoke to him about Maori studies which he did not want to take again. However, he had talked to an older brother:

He asked me, he said "What are you going to take?" and, you know, I told him I was gonna do commercial artist, and he said, "Oh, main one is art. Just take art".

It seemed very likely that Wiremu's choice of commercial art as a career was influenced by the fact that his older brother had taken a commercial art course at the technical college. However, Wiremu had little information about other subject areas. The subjects that he nominated were all subjects that needed no pre-requisites, but even so he had problems. When interviewed the following year about accounting, which had been one of his choices, he said:

I dropped it... I didn't like it... the work was too hard, I suppose.

Pressed further, he explained:

I took accounting, 'cos, er, I dunno, Maori was boring or something. I don't know why I dropped it. And then, just dropped accounting 'cos it was getting hard, and straight back to Maori.

Wiremu's interviews suggested that even though he had spent

two years in the secondary school system, he had little information about the various subjects offered as options in form five and had received little help in making his choices. He was further disadvantaged by difficulties with some of his school work, possibly due, in part, to his interrupted schooling.

Mark, on the other hand, was in a top stream class, had no serious problems with school work, and was able to give consideration to all the subjects he might possibly choose, although he had some difficulties in weighing up the pros and cons. For example, faced with dropping one of his options when entering the fourth form, he decided to drop technical drawing in favour of French, even though he had an ambition to become an engineer. He said:

> *It was the drawing side I couldn't really do... I could understand all the formula and how to draw them, but it just didn't come out on the paper.*
>
> *(Interviewer: You didn't feel it would be useful if you wanted to be an engineer?)*
>
> *Yeah, but I would have had to drop French. I got top mark in French.*

Even so, Mark did not continue French into his fifth form year, explaining that he did not have the commitment to continue. His comments about two other subjects suggested that Mark was faced with a dichotomy between what he would like to do and the expectations placed on him by staff and other pupils. When asked about English, Mark admitted to a desire to continue writing when he left school as this was something he enjoyed. He said:

> *I really do like humour and stories that revolve around humour, and this teacher that I have, I don't think she appreciates my sense of humour like last year... I find it frustrating... If I wanna get a good mark, I can do it. I can do it easy. It's more of a challenge to me to do humour. She just refuses to mark the humour stuff that I do.*

Then, when asked if he had ever been tempted to take typing, since he himself suggested that it would be useful for typing out his stories, he admitted:

sort of, but I'd get quite a bit of flak from the other kids, because girls did it.

Mark had no older siblings and in common with many of the younger boys, claimed not to have accepted advice from his parents. He said:

I made up my mind, really, before I asked and they made me consider other ones, but I wanna stick with these... I think Mum was pretty keen on me doing geography... I think she did well at it in school. She wanted me to do well. I said these are the ones I wanted.

Wiremu and Mark were just two of the 37 pupils in the initial fourth form sample who were faced with decisions about their fifth form subjects. Even though these pupils were expected to be better able to make informed decisions, Wiremu's experience suggests that this was by no means possible for everyone and Mark's comments suggest that there were a number of hidden factors influencing pupils' decisions.

7.6 Criteria used in choosing subjects - form four.

It was not possible to analyse the form four data by subject because the greater range of subjects available to fourth formers and the smaller sample meant that any given subject was chosen by few, if any, pupils. However, it was possible to analyse pupils' comments over all and to compare the criteria used by fourth formers with those used by the form two children choosing subjects.

Analysis of the fourth form transcripts was done in the manner described in the previous section with respect to the form two transcripts. Again, a method of trial and error was used to identify the salient groupings of criteria used. The differences noted were attributed to the form four pupils' ability to refer more frequently to previous experience of the subjects offered, and to their knowledge of the teachers likely to be taking the subjects. Accordingly, this time the major criteria used in differentiating between subjects were identified as subject variables and teacher variables. The major variables identified under each heading were as follows:

SUBJECT VARIABLES (Positive and negative):

Affective
Utilitarian
Content
Level of difficulty

TEACHER VARIABLES (Positive and negative)

OTHER VARIABLES (Positive and negative)

It can be seen from this list that the form four pupils were essentially subject-centred. This meant that they thought in terms of the demands and attributes of the different subjects, rather than in terms of their own needs and abilities. Teacher variables, though important, constituted a much smaller category. Very few other variables were mentioned. Subject variables and teacher variables are shown in Figures 38, below, and 39, p155.

SUBJECT VARIABLES	
POSITIVE	NEGATIVE
Affective: It's good*, challenging, exciting, cool, fun, neat, creative, a laugh, a real dag.	Affective: It's boring*, not interesting*, I don't enjoy it, it's terrible, revolting, frustrating, not much fun, a waste of time, an 'off' period, simple, basic.
Utilitarian: It's necessary, I need it, it helps me, It increases your skills, saves buying, It's useful (in life), relevant, useful for a job.	Utilitarian: It's not necessary, wouldn't help, no help when I leave school, not for a job, won't come into my career, I don't need to know, I don't need it.
Content: It has variety, different things, new stuff, you find out about ..., You learn more, learn a lot, it's practical, you do good things, we study what we want, It goes with ...	Content: I didn't learn much, learnt nothing, never did anything, so much to learn, too much theory, don't do what I like.
Level of difficulty: It's easy*, easier, makes me use my brain.	Level of difficulty: It's hard*, difficult, above my head.
* Denotes most popular descriptors.	

Fig. 38 SUBJECT VARIABLES - Fourth form data.

TEACHER VARIABLES	
POSITIVE	NEGATIVE
Teacher's nice, I like teacher, s/he has a joke, compliments us, she teaches you a lot, she's good with us, good at explaining, helps, makes it interesting.	I don't like teacher, teacher's confused, does her scone, teacher raves on, she goes mad at me, teacher's not very good, can't control us, teacher's boring, drags topics out, teacher is a problem, I hated it when teacher stopped the whole class.

Fig. 39 TEACHER VARIABLES - Fourth form data.

Attitudes to the teacher were found to have an important effect on pupils' attitudes to their school subjects. In only one or two instances did pupils mention that they liked the subject but not the teacher, and vice versa. The data suggested that pupils saw good teachers as having a sense of humour, being supportive, and able to put the subject across well. However, more comments were made about unsatisfactory teachers who could not control the class and were not able to put their subject across in an interesting way. While it important to note that the comments listed under teacher variables were repeated by a number of the fourth form pupils, it should also be mentioned that some individual pupils were more likely than others to mention teacher variables with respect to several of the offered options.

Although a category of other variables has been listed on the preceding page, no list of these variables was drawn up. The 'other' category consisted mainly of advice and information from others, particularly parents. However, unlike the younger sample, the fourth formers acknowledged the information and/or advice they received but, in general, insisted that they had not been influenced by it. In the main, the rôle of parents seems to have been one of helping pupils to sort out their ideas. One girl said:

> *I just sort of took the sheet home and said I'm taking such and such and such and such, and Mum and Dad just said "Well, do you know why you're taking it?" and they were pretty good and they didn't sort of pressure me into*

anything. They said "If that's what you want, that's your decision". They said as long as I'm keeping my options open. (A4 007g)

Another girl made a point that a number of the form two pupils, particularly the boys, had put forward:

They did (discuss it) a bit, but I knew what I wanted. Like, if they made me pick something I didn't want to take then I wouldn't concentrate. I'd just rebel. (A4 011g)

Some fourth formers felt it would be a waste to drop a subject they had been taking for two years. One was advised by her mother:

I talked to Mum whether I should take biology and history and all of that, and I didn't know whether I was gonna take typing, but she said since I'd done it this long I should keep it going if I still like it. (B4 008g)

But it was apparent that not all parents were well informed about the consequences of certain decisions. A girl explained:

My mother reckoned I should have dropped the typing and taken economics, but I didn't want to. I wanted to do the typing and leave the economics, 'cos you can pick it up in the sixth form. (B4 007g)

Although many of the younger pupils were wary of admitting that they might have been influenced by classmates' decisions, a number of the fourth formers described how they had planned their courses with their friends. A boy explained:

We were given the sheet at school and we all decided what subjects to take, more or less to end up in the same class together. (B4 012k)

And a girl said:

I talked to my best friend... She said that home economics and clothing was good, and seeing we did history in the third form, she'd take it with me. (B4 010g)

In summary, fourth formers' comments about the optional subjects differed significantly from the comments made by the younger pupils about their third form options. Whereas the form two children relied heavily on information from parents and older siblings about subjects which they themselves had not experienced, fourth formers were able to draw on their own experiences of many of the subjects. They referred to personal, subject and teacher variables in categorizing the options.

Parents of fourth formers had reportedly helped them by suggesting ways in which they should weigh up their choices, rather than by telling them what they should choose. Many pupils chose their subjects after consultation with peers, but there was little evidence in the data of strong feelings about sex appropriateness among the fourth formers. It must be remembered, however, that at this level girls could no longer consider workshop subjects or boys typing, because these subjects required pre-requisite study in forms three and four.

CHAPTER EIGHT

RATIONALIZATION

OVERVIEW: This chapter examines pupils' final decisions and analyses their comments after experience of the optional subjects.

It was not until the form two and form four pupils were re-interviewed at the beginning of their third and fifth form years respectively, that the researcher became aware of the tentative nature of many of their earlier decisions. Many of the children from the 'B' sample, in particular, had made changes from the subjects they had nominated at the research interview, even though this was held within days of their choices being recorded by the school.

In this chapter it is proposed first to consider the changes made by pupils in the sample groups and the reasons given for those changes, then to discuss pupils' attitudes to the options after experience, as evidenced by the re-interview data. These aspects of subject choice will be considered first for the third formers and then for the smaller fifth form sample.

8.1 Option changes at 'A' High School - form three.

It will be recalled that children enrolled at 'A' High School were required to make their third form subject choice at the time of enrolment. Even though all the children had enrolled at the high school when first interviewed by the researcher, three of the 'A' sample subsequently changed one or more of their options. (See Table 3, p159.)

At the initial research interview, one of the boys who had not chosen Maori said:

> *My sister takes Maori. I think it's pretty hard so I'm not taking it. (Ax2 012km)*

But the following year the school option list showed that he was taking Maori instead of economic studies. When asked how this came about he explained:

TABLE 3 THIRD FORM SUBJECT CHOICE - 'A' HIGH SCHOOL SAMPLE

Ax2 001g	Home economics	Typing
Ax2 002b	Economic studies	French
Ax2 003g	Art	German
Ax2 004g	French	Home economics
Ax2 005b	Art	Technical drawing
Ax2 006b	Metal/wood	Technical drawing
Ax2 007g	Art* (Economic studies)	Music* (Technical drawing)
Ax2 008g	Economic studies	Typing
Ax2 009g	Technical drawing	Typing
Ax2 010bm	Metal/wood* (Economic studies)	Technical drawing
Ax2 011b	Art	Technical drawing
Ax2 012bm	Metal/wood	Economic studies* (Maori)
Ax2 013b	Metal/wood	Technical drawing
Ax2 014b	Economic studies	Technical drawing
Ax2 015b	Metal/wood	Economic studies
Ax2 016g	German	Economic studies
Ax2 017g	Maori	Metal/wood
Ax2 018b	Art	Technical drawing
Ax2 019b	Metal/wood	Technical drawing
Ax2 020gm	Maori	Economic studies
Ay2 001g	Economic studies	Typing
Ay2 002g	Economic studies	French
Ay2 003g	Technical drawing	Typing
Ay2 004b	Economic studies	Art
Ay2 005b	German	Technical drawing
Ay2 006b	Technical drawing	French

(* Changed after enrolment)

Um, I didn't know what economic studies was but everyone took it, so I took it. But Miss ... (the Maori teacher) told us what we did in Maori and that, so me and some others decided to change... On our orientation day she called us up when everyone left - me and another boy. She just asked us whether we'd like to take it. And then we gave our names to (the dean) and he sorted everything out. (Ax3 012bm)

According to the boy, the teacher had singled him out because:

(She) took my sister and she just wanted to take me. (Ax3 012bm)

Even after this intervention by the Maori teacher, the total number of children taking the subject at the school in form three was only 23, and 16 of these were girls. This may suggest a reluctance on the part of boys towards taking a language, or it may be to some extent due to the pull of technical subjects which were very popular with boys. The majority of children in the Maori class were themselves Maori, but the total percentage of Maori children in the school was small. Therefore in order to keep the subject alive it appeared that a little canvassing was necessary. One of the problems may have been that the form two children had little idea of what was involved in the 'A' High School Maori studies course. Certainly, children's accounts of their high school experience bore little relation to their experiences of Maori at primary and intermediate school. When asked how he felt about Maori, the boy who had made the change said:

Um, it's better (than economic studies). You learn more things, and I like it. (Ax3 012bm)

Another of the boys (Ax3 010bm) made a change from metal and wood technology to economic studies. At his re-interview he explained:

I changed it because I thought that economic studies would be better... after orientation day... My sister had been doing it and she thought it was better, and I didn't really like metalwork as much as I thought I did. (Ax3 010bm)

This boy was also quite satisfied with his change. After experience of economic studies he said:

It's a lot better. (Ax3 010lm)

In the third instance, a girl (Ax3 007g) was found to have changed both of the options she had said her parents advised her to select. She was now taking economic studies and technical drawing instead of art and music. At the initial interview with this girl some inconsistancies of argument were noted, and these are summarized in Figure 40 below, which shows the six personal constructs identified by the girl during the course of the interview.

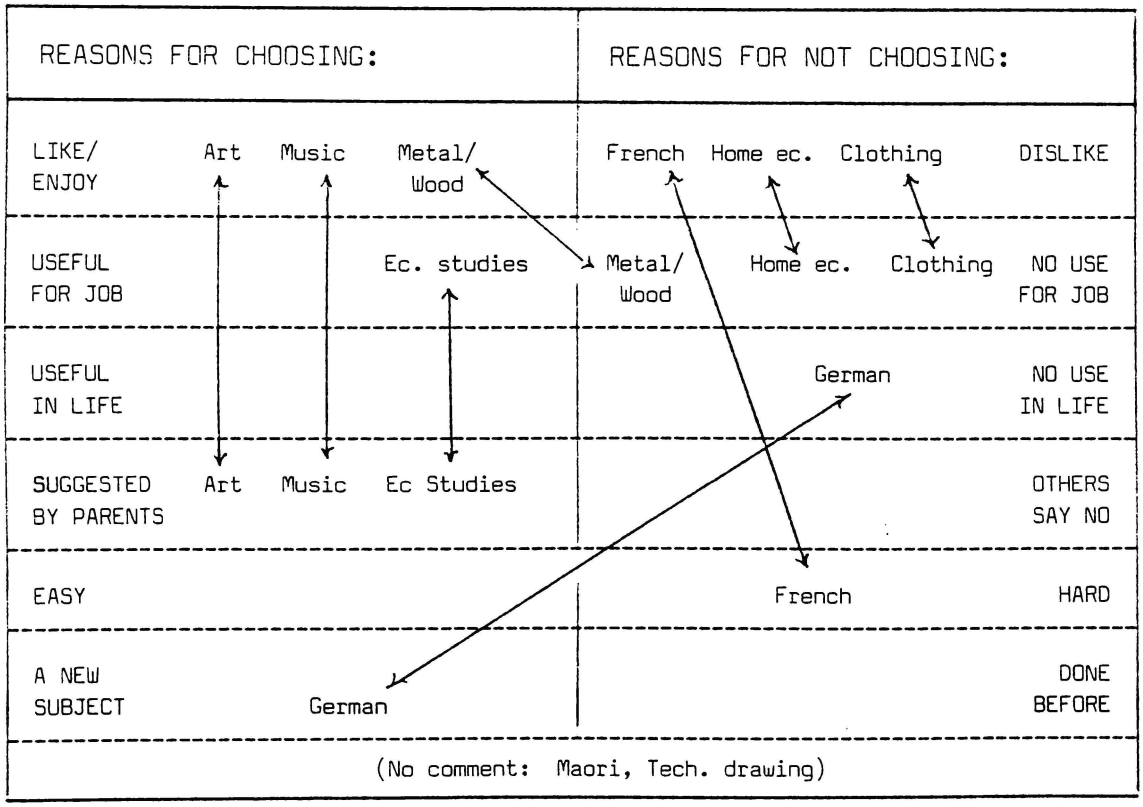


Fig. 40 CATEGORIZING OPTIONAL SUBJECTS - subjects chosen and not chosen by pupil Ax2 007g at initial interview.

Three subjects (metal and wood technology, home economics and clothing) were rejected by the girl and her parents because these were seen to have no value in a future job, yet neither of the subjects chosen (art and music) was seen as useful for a job. The

girl's explanations were as follows:

> *I like doing art. Mum and Dad think I'm quite good at it and I've taken that as one of my subjects. I enjoy doing it a lot. Mum says there are two lots of art you can do - history of art and making of art. I like finding out who's done things.*

And

> *I like doing music. I learn the piano. Mum and ... Dad and I decided that I'd take music because I liked doing it, except for the theory part... but I really enjoy music (Ax2 007g)*

The major criteria used as the basis of choice were thus subject liking and ability. Job potential was not mentioned in connection with the chosen subjects.

This girl appeared to be much more strongly influenced than others were by the suggestions made by parents. She said:

> *They told me the most they could about every subject, and then we sat down and decided which ones I would most enjoy, because there wouldn't be much point in me taking a subject if I didn't like it, and we talked about the jobs that would be mainly likely... for my generation, and that was more computer-type things.*
>
> *(Interviewer: Well, the subjects you've actually picked are art and music. Doesn't quite fit in with what you've said there.)*
>
> *No, I know... Well, we decided mainly which ones I was good at and which ones I would most enjoy, and those were the two. (Ax2 007g)*

Over the Christmas break, however, the girl and her parents continued to think about her subject choice:

> *We went on holiday and we talked to my aunty. She's got two children at high school, and Mum and Dad sort of talked to her and changed their minds... I didn't really know what to take so I didn't mind. (Ax3 007g)*

Asked why she had dropped music, the girl said:

> *Because I'm already learning... I already have private lessons, and we decided that I would probably already carry on with that so I wouldn't really need to do music. (Ax3 009g)*

This argument was similar to that used by many other children who expressed an interest in music but did not choose to take it as an option. In explaining the change to technical drawing the girl said:

> *Well, my dad's a draughtsman. Oh, he's not really that. He doesn't do that any more, he's sort of the boss. He used to do that.*
>
> *(Interviewer: So was he able to tell you about it?)*
>
> *Yeah, and I liked the sound of it, and I like it now. It's really good. (Ax3 009g)*

Thus, in revising their original choice of subjects this girl and her parents had moved towards the popular job-utility criterion. The choice of technical drawing, instead of art, and economic studies, which had initially been selected as a reserve subject, allowed them to remove the dissonance previously apparent between the criteria used for choice and the criteria used for rejection.

8.2 Option changes at 'B' High School - form three.

When initially interviewed the form two children in the 'B' sample had enrolled at 'B' High School but had not been required to state their optional subjects at enrolment. Many of the children were still undecided when interviewed by the researcher, even though their final choices had to be made within a few days. Only 10 of the 26 children (38.5%) actually took the three options they nominated at their research interview. A further ten were undecided about one or more of their options when interviewed by the researcher. Table 4, p164, lists the subjects favoured, and the eventual choices made by the 'B' sample.

When the 'B' High School option lists were examined at the beginning of the following year, it was found that five of the sample

TABLE 4 THIRD FORM SUBJECT CHOICE - 'B' HIGH SCHOOL SAMPLE

Bx2 001b	Music	Woodwork	Tech. drawing
Bx2 002g	? (Music)	Art* (Tech. drawing)	Typing
Bx2 003g	French	T.D? Home ec? (Tech. drawing)	Typing
Bx2 004b	Env. studies	Metalwork	Tech. drawing
Bx2 005g	French? Music? (French)	Tech. drawing	Typing
Bx2 006b	Env. studies	Woodwork	Tech. drawing
Bx2 007b	Env. st? German? (Env. studies)	Metalwork	Woodwork
Bx2 008g	Env. studies	Metalwork* (Typing)	Tech. drawing
Bx2 009g	Env. studies	Art	Clothing* (Typing)
Bx2 010b	History	Woodwork	Tech. drawing
Bx2 011bm	? (Maori)	? (Metalwork)	? (Woodwork)
Bx2 012g	History* (French)	Typing	Art* (Clothing)
Bx2 013g	? (French)	? (Clothing)	Typing* (Art)
Bx2 014b	French	Tech. drawing	Woodwork
Bx2 015gm	Maori	Art* (Home ec.)	? (Clothing)
Bx2 016b	? (Env. studies)	Tech. drawing	Metalwork
By2 001gm	Maori	? (Typing)	? (Home ec.)
By2 002b	German	Tech. drawing	Typing
By2 003g	Env. studies	Tech. drawing	Art
By2 004b	French	Metalwork	Tech. drawing
By2 005g	Env. studies* (French)	Home ec.	Typing
Bz2 001b	Env. studies	Woodwork	Tech. drawing
Bz2 002b	Env. studies	? (Metalwork)	? (Tech. drawing)
Bz2 003g	Env. studies* (Maori)	Typing	Clothing* (Art)
Bz2 004g	French	Art	Typing
Bz2 005b	Env. studies	Woodwork* (Metalwork)	Tech. drawing
Bz2 006g	Env. studies	Typing	Home ec. (Clothing)

* Denotes subject change - final choice in brackets

children (19.2%) had changed their minds about one (and in one case, two) of the options to which they had appeared committed at the research interview, and a further four (15.4%) had been re-directed by the school. When they were re-interviewed by the researcher these nine children were asked to explain their subject changes. As was explained in Chapter Three, the 'B' sample did not experience their second half-yearly option until after the mid-year break. Comments about subjects in this option were therefore written, rather than spoken.

Perhaps the most interesting case involving subject change at 'B' High School related to a girl who at the original interview showed herself to be strongly in favour of metalwork. She said that her father did not think it a useful subject for a girl and thought she ought to take typing, but she explained:

> *I don't think I wanna take (typing), because my sisters take it... Dad wants my sisters to be a secretary, but I don't wanna be a secretary, I wanna be a truckie. (Bx2 008g)*

The girl's father seemed to be strongly of the opinion that typing was for girls who could become secretaries, and that metalwork was for boys. For him, the interest and aptitude of his daughter were apparently not important considerations in relation to these subjects. The girl explained:

> *Dad, in a way, doesn't want me doing metalwork and woodwork 'cos he'd rather me doing more or less of a girl's thing, and I wanna do metalwork and woodwork, so I'll have to wait until the interview. (Bx2 008g)*

The interview she spoke of was the formal interview with a staff representative from 'B' High School, which she was to attend with one of her parents. Although unable to be present on this occasion the researcher was aware that the Head of the Technical Department at the school discouraged girls from taking workshop subjects. In a lengthy discussion about technical subjects with the researcher he had said:

> *I advise girls not to take metalwork or woodwork because strength is important in the use*

of tools. They can do the work, but I find they have to go at a much slower rate than the boys and it's frustrating for them. If we had completely mechanized workshops then the girls would not be at a disadvantage. (Technical, Bm)

It is therefore unlikely that the girl would have received any encouragement to take metalwork.

By the time she was re-interviewed by the researcher this girl had obviously reconciled herself to her father's wishes. She made no mention of ever having wanted to take metalwork, but was not happy with her typing option. Asked why she had chosen it, she said:

I dunno. I just picked it. I thought it would be interesting, but I hate it... Boring!

Unlike Karen (Ax2 017g) at 'A' High School, whose case is discussed in Chapter Nine, this girl had no support either from home or from school in making an atypical subject choice. However, it was noted that although compelled to take a subject she did not want to take, the girl did not blame her father, when having experienced the subject she found her reluctance justified. Instead of blaming her father she directed her dissatisfaction towards the subject itself. The same process was noted in the case of Mary (A4 010g - see p107.) whose father had also insisted that she take typing. It was surmised by the researcher that this displacement enabled the girls to express dissatisfaction without affecting the father-daughter relationship.

Four of the 'B' High School sample were re-directed by the school into options they had not chosen. It was presumed that this was for reasons of convenience relating to class numbers and staffing but this could not be checked as the school did not give any explanations. One girl (Bx3 013g) was able to change back to her original choice at the mid-year option change, but the others did not questions the fact that the school had excluded them from the subjects they had hoped to take. One girl said:

I got clothing because too many people must have wanted art... I don't really mind because I like clothing as well. (Bx3 012g)

Three of the children in the 'B' sample were found to have

changed an option nominated at the research interview for a language. Two of the children were taking French and the third was taking Maori. In view of the school's stated policy, it seems likely that the children were influenced by comments made at their personal interview with a staff member, however, none of them specifically mentioned this.

Whereas none of the 'A' sample had been re-directed by their school to third form options they had not selected, there seemed to be a strong school influence on the 'B' sample. The restrictions of the two-list option system meant that not all children could be accommodated in their chosen subjects, the school encouragement of languages possibly accounted for some changes, and in addition, two children who were placed in a bottom-stream class had their subjects chosen for them. These last two children (Bx3 011bm and Bx2 015gm) are the subjects of case studies presented in Chapter Nine.

8.3 Rationalization after choice - form three.

Rationalization was found to be the major process by which pupils accommodated their subject choices or the choices made on their behalf by parents of teachers. They did not blame themselves or others who had advised them when subjects fell short of their expectations, but instead focused their criticism on subject specific factors.

Children's categorizations of the optional subjects during the decision making period were sorted into four groups as explained in Chapter Seven. After experience, however, their comments became polarized and fell more readily into three categories: those that were essentially positive about the subject; those that mentioned both positive and negative aspects and were regarded as ambivalent; and those that were essentially negative. Summaries of the comments made by form three pupils at both high schools are presented under this classification in Appendix E (Volume II). Comments for the two schools have been combined, except in the case of technical drawing which was the most popular subject, and in the cases of those subjects offered at only one of the schools. Schools can be identified through the pupils' reference numbers.

Although the range of comments made by pupils about each subject

is likely to be indicative of the range of attitudes to the options to be expected from pupils at the schools, it is not claimed that weighting is proportionately representative of the attitudes ao all third formers.

After experience of the optional subjects very few of the sample third formers regretted their choice and most pupils were very positive about their subjects. However, there were differences in the kinds of comments made about the different subjects. Since these comments can serve to validate pupils' stated reasons for choice and since they will undoubtedly form the basis of any future choice they will be analysed subject-by-subject in the sections to follow.

8.3.1 Attitudes to languages.

It will be recalled that many of the children who considered languages as an option did not enjoy their form one and two experience, particularly of French and to a lesser extent Maori, and those who eventually chose a language tended to do so as a result of encouragement from home.

Seven of the ten children who took French spoke very positively about French at secondary school. They found it enjoyable and more fun than previously and felt that being able to say something in the language was rewarding. They were also impressed that teachers had travelled overseas. However, problems were already beginning to appear. Those who had difficulties mentioned the problems of pronunciation and the fact that words sounded different from the way they were written. The work load was also a problem because of the constant need to learn vocabulary. This meant regular homework and daily tests, putting pressure on those who did not find such learning easy.

There were few comments about German since only three pupils chose this subject, but all were positive. They mentioned receiving high marks, learning more than expected and having a good teacher. Even though homework was mentioned none of the children said it was a burden. Unfortunately the samples were too small to indicate whether there were any major differences between French and German as subjects or whether the differences were merely in the children taking the languages.

Five of the seven taking Maori were Maori children and most spoke positively about the subject. The response was particularly enthusiastic from 'A' High School as the children had just been on a trip to the East Coast which they had enjoyed very much. Again the positive comments related to actually using the language and the fact that the teacher was widely travelled. Pupils also enjoyed learning about the cultural background of the subject - a factor that had been mentioned in connection with French. Again, as indicated in the initial interviews, difficulties related to punctuation. However, a girl who said she did not like the subject and a boy who was non-committal were later identified as having problems generally at school and their comments were felt likely to have been coloured by their over-all experience. The cases of these two pupils (Ax3 015gm and Ax3 011bm) are discussed in Chapter Nine.

Children's attitudes to languages as evidenced by their comments after experience upheld the researcher's finding from the initial interview data that positive attitudes were related to a belief in the value of learning a language and a willingness to cope with a heavy work load. Children's enjoyment of secondary school language learning was found to be enhanced by extra-curricula activities and by the contributions of well-travelled teachers. Some difficulties were experienced with both oral and written work. Children's further comments showed that they tended to measure their success by the grades they received and by their ability to communicate orally, those with relatives who spoke the language being keen to try out what they had learnt.

8.3.2 Attitudes to technical subjects.

Technical drawing was the most popular subject among third formers in the sample and among the total third form intake of the two high schools. It was chosen by 45% of the third form sample and of these, 78% made very positive comments. As at the initial interviews, technical drawing was again claimed to be potentially useful. It was approved of because it taught new skills, emphasised learning by doing and did not involve the writing which children found they had to do in other subjects including the so-called practical ones.

Children perceived that success in technical drawing depended

on accuracy, competence with the drawing instruments and an ability to understand what was required. A teacher who helped was appreciated, but dislike of the teacher did not necessarily preclude liking the subject. The biggest problem that emerged was due to the range of competence shown by class members. Whereas some children felt they went at a good pace, some felt there was never enough time to complete the drawings and others said they were bored by waiting for the slow people to catch up. There was also a suggestion that boys resented the fact that girls might slow the class down, and that girls felt uneasy about being in a minority. Children measured their success by the grades they received and some were disappointed. The fact that a girl who worked slowly and needed help from the teacher received high grades was resented by a boy who said he worked quickly and without assistance but got lower grades than the girl.

There was little difference between the kinds of comments made about technical drawing at the two schools, and unfortunately the sample was not large enough to give any indication of possible differences due to the fact that one school was streamed and the other unstreamed. It is possible that an unstreamed school might have a wider ability range in one class; however, this could be countered by more positive self concepts of pupils and more understanding shown by teachers used to dealing with mixed ability classes. On the other hand, since technical drawing skills are more spatial than numerical and verbal, it is possible that even a group of pupils designated high-ability by other teachers could display a wide range of aptitude in this area.

Positive comments about woodwork and metalwork at both schools mentioned freedom of choice in the projects undertaken, and at both schools working slowly was mentioned as a negative factor. There were more comments available from 'B' High School where these subjects were strongly favoured by the boys. In general they felt that the projects were more useful than the ones they had done at intermediate school, and they mentioned that they had already made several small articles in woodwork. Metalwork was commended for its job-relevance, the new skills it taught and the sophistication of its workshop equipment. Teachers at both schools were mentioned as being good and having a sense of humour.

Only one girl in the sample was taking technical workshop subjects so no comparison can be made of the experiences of girls at the two schools, and as Chapter Nine presents the experiences of the 'A' High School girl (Ax3 017g) as part of a case study they will not be considered here.

Pupils were generally satisfied with the workshop subjects, and the only real problems appeared to be due to the limited time available in a lesson, mentioned at school 'A', and the pace of work which was too slow for one school 'B' pupil and too fast for another. This was apart from a perhaps more serious problem of social adjustment experienced by the 'A' High School girl.

8.3.3 Attitudes to home economics and clothing

Home economics was generally approved of by girls in the sample who took the subject. Only one girl complained of too much writing; two others mentioned the theory but said they did not mind it. Home economics was approved of as an enjoyable, practical subject, relevant to everyday life. There was no noticeable difference between responses to the subject at the two high schools.

Clothing was very much a minority choice among the sample pupils, none of whom chose the subject at 'A' High School. Of the four third formers who took clothing at 'B' High School only two spoke positively of the subject and one of these was a girl who had been excluded from the subject she had originally chosen. Positive aspects mentioned were subject utility, gaining confidence in new skills and the pleasure to be gained by wearing clothes one has made oneself. The negative aspects mentioned by one girl included too much bookwork (writing) and poor classroom discipline which she felt was due to lack of motivation on the part of the pupils and poor control by the teacher. The entirely negative comments made by one pupil (Bx3 015gm) are referred to in the case study of Moana in the following Chapter and will not be discussed here as the girl was put in the class against her will and had other problems to contend with.

From the comments about clothing it was deduced that there was a conflict of expectations between pupils who wanted only practical skills and a teacher committed to a more academic and theoretical presentation than pupils would have liked. The large percentage of

girls taking clothing at 'B' High School (48.3% of the total third form girls compared with only 8.1% at 'A' High School) is not explained by the data. In view of the lack of popularity of the subject (as evidenced by the form two interview data) it seems likely that 'B' High School directed a number of girls (particularly low-stream girls) towards this subject for timetabling and staffing reasons.

8.3.4 Attitudes to typing.

Typing was chosen by 65.4% of the girls in the 'A' and 'B' samples combined (17 out of 26). Ten of those who chose typing spoke positively about the subject after experience, saying that they felt they were making good progress in a useful skill. One girl said she liked the teacher. However, there were some problems with the subject. Some found the repetition boring; one girl said it made her very tired, and another was frustrated by the fact that she was not allowed to rub out mistakes. It appeared that a positive attitude to typing was related to the belief that it provided a useful skill and with a willingness to persevere with what could be a tiring and repetitive activity. One girl mentioned that she preferred to type paragraphs that were interesting and this seemed not unreasonable in a skills-based subject.

8.3.5 Attitudes to art and music.

All four pupils who chose art at 'B' High School spoke positively about the subject even though they also had a core art programme; one of the four who took art in the 'A' sample said he did not really like the subject. However, there were differences between the programmes offered at the two schools. At 'B' High School the children had experienced a variety of activities including making pottery and modelling clay; at 'A' High School there was an emphasis on drawing skills, beginning with the human figure. One boy who had previously enjoyed art activities but did not see himself as particularly talented was less attracted to the fine arts approach; another, who had thought he was good at art, was disappointed in his marks. For those who spoke positively of art, it had lived up to their expectations as an enjoyable change of activity from classroom writing, allowing them scope for creativity and the opportunity to learn new skills.

Option music was chosen by only two pupils, both from the 'B' High School sample. One of them thought the subject gave him scope to follow his own interests; the other was sometimes bored by what she felt was irrelevant. Music is discussed as a case study in Chapter Ten, so no further comment will be made here.

8.3.6 Attitudes to history and environmental studies.

These two subjects were offered only at 'B' High School as an alternative to languages. Only one boy in the research sample had chosen history and he was disappointed because it did not deal with his particular interest, the Second World War, but he said he expected future topics would be interesting.

Environmental studies, in contrast, was chosen by nearly half the sample, most of whom were boys. All but two of the children spoke very positively about the subject. It was regarded as interesting, relevant and not too difficult. Pupils also seemed to like drawing the maps and diagrams. Of the two who had reservations, one thought the subject difficult, the other had problems keeping up with the work and was also disappointed that the class was studying the town rather than the country as he had expected. Despite the fact that this subject did not lead to advanced study and may have been chosen primarily to avoid languages in a tied option system, satisfaction with choice was very high.

In order to find out whether the introduction of environmental studies at 'B' High School had been at the expense of pupils' satisfaction with the social studies core at the school, pupils' comments about social studies at the two schools were collated and compared. It was assumed that if the comments about social studies were noticeably more favourable among the sample third formers at 'A' High School, then this could possibly be due to the limited content offered at 'B' High School to avoid any possible overlap with environmental studies.

In fact, the reverse was the case. Comments about social studies were found to be more favourable among the 'B' High School third formers. Only 32% of the 'A' children spoke entirely favourably of social studies, while 64% mentioned both good and bad aspects of the subject and 4% made negative comments. At 'B' High

School 63% of the third form sample spoke positively about their social studies, 25.9% were ambivalent and 11.1% made negative comments. Pupils at both schools said they liked social studies because they liked their teacher, found the topics interesting and liked the activities, but pupils at 'A' High School commented more frequently on all the work they were expected to do. One felt that they were 'going over the same stuff again and again', but a 'B' High School pupil found that repetition of a topic he had done at intermediate had been to his advantage because he got high marks. More negative comments were expressed by pupils at 'B' High School but these were not specific. Complaints about being bored, not liking social studies and having to do a lot of writing were made at both schools. (A summary of comments is to be found in Appendix G, Volume II.)

The only conclusion to be drawn from children's comments is that attitudes to social studies at 'B' High School were not adversely affected by the fact that some of them took environmental studies as an option and this meant that the content of social studies was slightly restricted by the presence of this closely related subject. Whether one would like to conclude that the range of subject exposure was unnecessarily narrow for a third former who took environmental studies in addition to the social studies core is another matter.

8.3.7 Attitudes to economic studies.

Economic studies was offered as an option only at 'A' High School, and it will be recalled that children spoke very favourably about this subject in their initial interviews. None had previous experience of this subject and most were following the recommendations of their parents. However, a high degree of satisfaction was expressed at the re-interviews by those who had chosen economic studies. Children referred to the relevance of the subject, particularly in everyday life, to having a good teacher and to being able to draw pictures instead of writing. One girl did not enjoy working in a group with boys who did not accept her ideas and another blamed herself for inattention.

Economic studies was a subject which, in general, fulfilled pupils' expectations, but it should be noted that the majority of those taking this subject were girls. The fact that economic studies and typing were the most popular subjects for girls at 'A'

High School (as opposed to technical drawing and metal and wood technology for boys) suggests that the many girls were considering the sex-appropriateness of subjects even though sex differences in subject choice were not as marked as they were at 'B' High School.

8.3.8 Summary.

In general, pupils expressed satisfaction with their options in form three. The satisfaction appeared to be highest when expectations matched actual experience and was enhanced by positive attitudes to the teacher and also by a certain amount of content choice, for example in art and workshop projects. Where problems were encountered, they tended to reflect inappropriate pacing of the lesson for the individual pupil, dissatisfaction with the content of the lessons and difficulties occasioned by the behaviour of other members of the class.

Pupils' comments about the optional subjects indicated that they rationalized their attitudes in terms of subject variables such as content, activities, and the teaching style of the subject teacher. No pupils, including those who were re-directed by the school, made any reference to having regrets about their placement. In other words, they did not blame themselves or the school for their dissatisfaction; rather, they blamed the subject or the teacher.

8.4 Categorizing pupils' rationalizations - form three.

Comments about the optional subjects made by third formers were examined to provide an over all categorization of the criteria used to rationalize attitudes towards the options. Using the original transcript data, the researcher listed all subject-related descriptors used by each pupil in the combined ('A' and 'B') samples. A process of data sorting and comparison resulted in identification of 40 categories of response. These are shown in Figure 41, p176, as bi-polar constructs falling into six major categories which in turn are divided into four groups: pupil variables (attitude and ability), subject variables (level of difficulty and value), teacher variables, and classmate variables. It was not possible to give a comparitive weighting to the categories elicited from the data because the weighting would have been biased

PUPIL ATTITUDE (AFFECTIVE VARIABLES)

It's good	It's bad
I love it	I hate it
I like it	I don't like it
I enjoy it	I don't enjoy it
I have fun	I don't have fun
I think it's interesting	I don't think it's interesting
I look forward to it	I don't look forward to it*
I think it's better than ...	I prefer ...
I like some parts	I don't like some parts

PUPIL ABILITY

I'm good at it	I'm not good at it
I get high marks	I get low marks
I get higher marks than I expected	I get lower marks
I can keep up with the class	I fall behind

SUBJECT LEVEL OF DIFFICULTY

It's easy	It's hard
It's challenging	It's too easy
It was hard at first but it's getting easier	It was easy at first but it's getting harder
I understand it	I don't understand it
I can concentrate	I can't concentrate
I get mixed up	I don't get mixed up

SUBJECT VALUE

It's worth doing	It's a waste of time
I learn a lot	I don't learn much
I learn new things	I don't learn new things
It's useful in life	It's not useful in life
It's useful in a job	It's not useful in a job
It's useful for the job I want	It's not useful for my job
It's personally rewarding	It's not rewarding

TEACHER VARIABLES

I like the teacher	I don't like the teacher
The teacher helps	The teacher doesn't help
S/he has a sense of humour	S/he has no sense of humour
S/he doesn't go too fast	S/he goes too fast
S/he doesn't go too slowly	S/he goes too slowly
S/he is fair	S/he isn't fair
S/he is good	S/he isn't good
S/he has travelled	S/he hasn't travelled*
S/he has taught others in my family	S/he hasn't taught others in my family*

CLASSMATE VARIABLES

*Other kids aren't rough	Other kids are rough
*Others don't play up	Others play up
*Others accept my ideas	Others don't accept my ideas

(* construct pole not used by any pupil in the sample)

Fig. 41 RATIONALIZATION - CONSTRUCTS BASED ON FORM THREE DATA

towards the more verbal pupils.

It was noted that in expressing positive attitudes towards the options pupils continued to use criteria relating to the perceived value of the subjects in everyday life or for a job. They also continued to use affective criteria as well as criteria relating to their own perceived abilities in the subject area. The major differences between the criteria used to differentiate between the subjects before and after experience at the high school were those concerning attitudes to the teacher. In forms one and two most pupils had been taken by their class teacher for the majority of subjects in the school day; now that they were at high school, having a different teacher for each subject made the teacher an important consideration in attitudes to the subject.

8.5 Option changes in form five.

Tables 5 and 6, p178, show the options chosen by the sample fourth formers at 'A' and 'B' High Schools, respectively, and also indicate the changes made before or at the beginning of their fifth form year. Three of the 'A' sample and eight of the 'B' sample were found to have made subject changes when they were re-interviewed in form five.

The changes at 'A' High School were all made before the end of the fourth form year, two pupils (A5 013bm and A5 017b) reporting that they had responded to suggestions from teachers that they should choose again, since their preferred subjects were oversubscribed, the other (A4 004g) reporting that she had changed her own mind. At 'B' High School, two pupils (B5 011g and B5 013g) who were taking six subjects, found that they had to drop a preferred subject (art and French respectively) for timetabling reasons. It was mandatory that they take geography, history or music, and they both selected geography. Two pupils (B5 003g and B5 005bm) began accounting but dropped the subject in favour of history and Maori, respectively. One said she did not like her teacher, the other said he could not cope with the work. Another two pupils (B5 007g and B5 008g) dropped history for science and home economics respectively, one because her mother convinced her that science was necessary, and the other because she was disappointed by the subject content when classes began. A girl (B5 009g) changed from biology to science because she felt it was

TABLE 5 FIFTH FORM SUBJECT CHOICE - 'A' HIGH SCHOOL SAMPLE

A5 001b	ENGLISH	MATHS	SCIENCE	TECH. DRAWING	ENGINEERING	
A5 002g	"	MATHS	SCIENCE	EC. STUDIES	GEOGRAPHY	CLOTHING
A5 003b	"	MATHS	SCIENCE	TECH. DRAWING	ENGINEERING	
A5 004g	"	MATHS	L/SCIENCE	EC. STUDIES* (SOC.STUDIES)	TYPING	
A5 005g	"	MATHS	SCIENCE	ACCOUNTING	TECH. DRAWING	
A5 006b	"	MATHS	SCIENCE	GEOGRAPHY	WOODWORK	
A5 007g	"	MATHS	SCIENCE	EC. STUDIES	HOME EC.	
A5 008b	"	MATHS	SCIENCE	EC. STUDIES	HORTICULTURE	
A5 009b	"	MATHS	-	ACCOUNTING	TECH. DRAWING	GEOGRAPHY
A5 010g	"	MATHS	-	ACCOUNTING	SOC. STUDIES	TYPING
A5 011g	"	MATHS	-	ACCOUNTING	SOC. STUDIES	TYPING
A5 012gm	"	L/MATHS	-	TYPING	HOME EC.	MAORI
A5 013bm	"	L/MATHS	-	SOC. STUDIES* (WORK EXP.)	MAORI*	
(A4 014b	"	MATHS	SCIENCE	TECH. DRAWING	ENGINEERING)!!	
A5 015b	"	MATHS	SCIENCE	ACCOUNTING	HORTICULTURE	
A5 016g	"	MATHS	-	HOME EC.	HORTICULTURE	TYPING
A5 017b	"	MATHS	SCIENCE	BIOLOGY* (HORTICULTURE)	ACCOUNTING	EC. STUDIES*
A5 018gm	"	L/MATHS	-	EC. STUDIES	ART	TYPING

KEY: * denotes subject changed or chosen after research interview

L/ denotes Local alternative to School Cert. maths and science

!! this pupil left school at the end of form four to attend another school

NB: Only English was compulsory for all pupils

TABLE 6 FIFTH FORM SUBJECT CHOICE - 'B' HIGH SCHOOL SAMPLE

B5 001b	ENGLISH	MATHS	SCIENCE	EC. STUDIES	GERMAN	GEOGRAPHY
B5 002g	"	MATHS	SCIENCE	HISTORY	ART	GEOGRAPHY
B5 003g	"	MATHS	SCIENCE	ACCOUNTING* (HISTORY)	GEOGRAPHY	
B5 004b	"	MATHS	SCIENCE	EC. STUDIES	ENGINEERING	HISTORY
B5 005bm	"	MATHS	-	ACCOUNTING* (MAORI)	ART	HOME EC.
B5 006gm	"	MATHS	-	HOME EC.	MAORI	GEOGRAPHY
B5 007g	"	MATHS	SCIENCE* (HISTORY)	GERMAN	TYPING	
B5 008g	"	MATHS	BIOLOGY*	HISTORY* (HOME EC)	TYPING	
B5 009g	"	MATHS	BIOLOGY*	TYPING	HOME EC.	
B5 010g	"	L/MATHS	-	HOME EC.	CLOTHING	HISTORY
B5 011g	"	MATHS	SCIENCE	FRENCH	TECH. DRAWING	ART* (GEOGRAPHY)
B5 012b	"	MATHS	SCIENCE	ACCOUNTING	GEOGRAPHY	
B5 013g	"	MATHS	SCIENCE	ACCOUNTING	TYPING	FRENCH* (GEOGRAPHY)
B5 014b	"	MATHS	SCIENCE	EC. STUDIES	GEOGRAPHY	
B5 015g	"	MATHS	SCIENCE	EC. STUDIES	ART	
B5 016bm	"	MATHS	SCIENCE	TECH. DRAWING	ENGINEERING	
B5 017b	"	MATHS	SCIENCE	ART	ENGINEERING	
B5 018g	"	L/MATHS	L/SCIENCE	HOME EC.	ART	
B5 019bm	"	MATHS	BIOLOGY*	ACCOUNTING*	HISTORY*	

KEY: * denotes subject changed or chosen after research interview

L/ denotes Local alternative to School Cert. maths and science

NB: English and maths were compulsory for all ppils

easier, having learnt that she could enter nursing with either subject. Finally, a boy (B5 019bm) made several changes which are discussed in Chapter Nine in the case study of Bruce.

8.6 Categorizing pupils' rationalizations - form five.

Analysis of pupils' comments after they had experienced their fifth form subjects showed that, as with the third formers, pupils did not in general refer to the wisdom, or otherwise, of their choices. Instead, they rationalized their feelings about the subjects in terms of subject variables, their own progress in the subject and/or their feelings about the subject teacher. In the sections to follow these three aspects, subject, self and teacher, will be considered in some detail.

8.6.1 Subject variables.

Since the form five sample was much smaller than the third form sample, it was possible to record individual comments from the transcripts, rather than wider categories of comment. (See figure 42, p181. However, it should be noted that some of the descriptors such as 'good' and 'boring' were used by pupils many times.

Subject variables fell into three main categories: affective variables, relating to how the pupil felt about the subject; utilitarian variables concerning relevance, or otherwise, to an occupation or to everyday life; and content variables. The three comments that did not fit into these categories could perhaps be called organizational variables. Most comments fell into the affective and content categories, and only five were concerned with utilitarian aspects. Pupils were at this stage concerned mainly with their feelings about the subjects on a day-to-day basis. The majority of comments were positive, but some pupils were disappointed either with the topics covered or with the methods used. One girl said of biology:

> *I hate it. Everything's written down on the board and we have to copy it down and that. (B5 008g)*

One 'A' High School boy complained that the things he had made so far in metalwork had been stolen, and it will be recalled that this was

SUBJECT VARIBLES	
POSITIVE	NEGATIVE
AFFECTIVE good quite good like enjoy favourite interesting makes you think enjoy the practical very good fun sometimes a lot of fun really nice I like drawing like practical	AFFECTIVE don't like not enjoying hate it pretty dull bit of a bore not that interesting unexciting sometimes don't like
UTILITARIAN I'm going to need the sciences It's just everyday life good for a job	UTILITARIAN I don't really see the point in it There's not much point in it other than if you go into some specialist field
CONTENT do experiments building a cabinet We had a court case - really good The work is all notes so it's easy to swot You learn a lot from it Going over what we learnt last year Most of it I know More practical than I thought get more discussion We're going into more detail what we did last year I like doing projects We do (a worksheet) by ourselves do different things learn new things learn about compounds and stuff good to learn things like that	CONTENT more work a lot of note taking more theory more book work too much work lots of homework you gotta work all the time get caught out behind got to sit and listen It's a lot of hard slog the same things over and over again (topics) boring
OTHER	OTHER The things I've made have been stolen I've got two teachers... it's confusing I don't know anybody in the class

Fig. 42 SUBJECT VARIABLES - FIFTH FORMERS' COMMENTS

the reason given by one of the younger boys for not choosing workshop subjects at this school.

8.6.2 Pupil variables.

A number of pupils focused on their own progress compared to others in their class when they were asked what they thought of their subjects. One boy said:

> *I started off not so good, but now I'm up with the class (in technical drawing). I think it was just getting into the swing of things, you know. I'd forgotten most of the stuff over the holidays. (A5 001k)*

But for several others problems seemed to stem from an increasing pressure of work in examination subjects. In particular, the fact that School Certificate English was to be internally assessed at 'A' High School was causing problems for some pupils:

> *With all the assignments we've had, I haven't been able to time my work properly. We've had a maths assignment, economics and an English one on top of that. And because English is assessed you've got to really, really work at it... And everybody's very competetive. It's really bad... even boys as well, in English, because they're trying to better each other just so they get a pass and, you know, there's a lot of copying going on if people... don't understand it... You get copied off if you don't watch it. (A5 007g)*

However, there appeared to be some difference between classes because another pupil said of English:

> *We don't really seem to do much. We just talk, you know, to each other most of the time. (A5 011g)*

Even so, the fact that was the School Certificate year had obviously influenced some pupils. For example one explained:

> *I work very hard and I like to concentrate more because I know this year's School C. (B5 006gm)*

Other comments are summarized in Figure 43, p183.

PUPIL VARIABLES	
POSITIVE	NEGATIVE
ABILITY/PROGRESS I understand about 75% of it I'm getting on really good in it I've been going pretty good I find it easy I'm managing alright I'm doing well in it I understand I can cope with it I'm good at maths I'm keeping up with the others I seem to be learning something with every new period I seem to be top of the class in that It's going really well I already know most of that I get there I do well It's a subject I can do I do quite well I can really do that well	ABILITY/PROGRESS Not so good, I'm slightly behind I've got my weak points I'm a bit behind I'm not doing too well in it, I keep on making these mistakes I'm not learning anything from it Struggling to get through Sometimes I can't keep up I seem to have a mental block I'm still a bit confused It's a bit confusing That's pretty hard going I'm not very good I'm having a bit of trouble I had a bit of trouble at the beginning of the year
APPLICATION I'm up with the class but I have to work at it At the beginning of the year I was going a bit slow, but I've started to... get myself together now I have a few problems but I get those sorted out	APPLICATION I'm not trying as hard as I should I haven't been able to time my work Sometimes I get lazy - don't do any work
IMPROVEMENT I started off not so good but now I'm up with the class My typing speed's going up I've improved... I work hard I didn't understand it much last year.. I understand it quite a bit now	

Fig. 43 PUPIL VARIABLES - FIFTH FORMERS' COMMENTS

8.6.3 Teacher variables.

Teacher variables were very important to some pupils and just over half of the total fifth form sample mentioned the teachers of one or more of their subjects. One girl (A5 005g) spoke about her subjects almost entirely in terms of her teachers. (See the figure below.)

TECH. DRAWING:	That's really good. I've got a good teacher. I've got my weak points... he's giving me extra exercises. Most of the boys here, they do engineering and woodwork and they're more familiar with it.
ACCOUNTING:	Good. We've got a new teacher for accounting. It's taken her a while to find out what we've done in previous years... She teaches us a little bit differently. sometimes we don't understand it.
MATHS:	Good. I've got the same teacher I had in third form. I reckon it's really good. We're getting written notes on the subject we're doing and then he'll give you examples and exercises.
SCIENCE:	Teacher does a lot of experiments for us to do, which is good... We actually do them ourselves.
ENGLISH:	Teacher's very good. It's quite good.

Fig. 44 TEACHER-ORIENTED COMMENTS MADE BY ONE FIFTH FORMER (A5 005g)

Figure 45, p185, shows that fifth form pupils echoed the concerns of the younger pupils in their responses to optional subjects. It seems likely, therefore, that although teacher variables did not figure prominently in pupils' categorizations of subjects before they experienced them, attitudes to the teacher were important influences on pupils' total experience of a subject. So much so, that in at least one case (B5 003g) a pupil preferred to drop a subject rather than continue with a teacher she claimed not to like. In another case (B5 019bm) a teacher refused to accept a difficult pupil in his School Certificate maths class any longer. (See the case study of Bruce presented in the chapter to follow.)

TEACHER VARIABLES	
POSITIVE	NEGATIVE
AFFECTIVE My teacher is really good I've got a good teacher (3) Teacher's good Mr ...'s a lot of fun Our teachers - they're alright I quite like the teacher I'm getting on really well with the teacher I can really relate to this teacher - she's really nice I'm enjoying it 'cos I've got Mr... Miss ... - she's a good teacher Teacher's nice	AFFECTIVE I got... a teacher I didn't like. I had him last year and we didn't get on very well It's a personality clash between me and the teacher... I don't think she's a very good teacher and she doesn't think I'm a very good student Our teacher is just like the one we had last year - just as bad I don't get on with my teacher. She... orders you to do things. The others say it differently
TEACHER ACTIONS/STYLE We've got a good teacher for it... He works you pretty hard but he makes sure you understand it This teacher, she listens a lot more than the other teacher... she wants to know why I think that way and I think that's really good The teacher makes it interesting The teacher explains it quite well We've got the same teacher as in the third form, but he's really changed so I can relate to him... He's slowed down a bit and he answers more questions now. He taught us as if we were university students instead of third formers - or maybe it's just that we've grown up - that he hasn't changed, we have We've got a good teacher that explains things really clearly	TEACHER ACTIONS/STYLE She teaches us a bit differently... sometimes we don't understand I don't like his way of teaching... he confuses me She doesn't give us much to do She just goes teaching on and on and she goes too fast We've got one we call Grannie who drones on and on I don't like the teacher we've got and he makes us do incredibly boring(things) He really spoon-feeds us. He just talks about it and you take notes He seems to talk and talk... You can see people turning off, and then he gets mad The teacher isn't much of a help The teacher doesn't help much We've got a slack teacher. We're having trouble with him because he tends to write things on the board and just says "Do it" and doesn't explain himself well
	TEACHER MANAGEMENT The teacher doesn't have... force on us. We muck about We've got this new teacher and we don't like him. He says..."If you don't wanna do (the subject) get out of my classroom" I'm not used to a heavy teacher...

Fig. 45 TEACHER VARIABLES - FIFTH FORMERS' COMMENTS

In summary, the fifth form pupils, like the third formers, focused on subject specific factors when considering their optional subjects after some experience. Like the third formers, this group mentioned subject content and teacher variables, but, possibly because they were working towards public examinations, showed much more concern than the younger children about factors affecting their personal progress in the subjects. Again, individual differences were noted. Some pupils put more emphasis than others on teacher variables and others were more concerned about their personal progress.

Because individual differences were found to be important, the following chapter will look more closely at some individual cases in order to illustrate something of the range of pupils' experiences.

CHAPTER NINE

CASE STUDIES - PUPILS

OVERVIEW: In this chapter three case studies are presented. These illustrate how individuals make decisions about their subject choices and highlight the particular concerns of different types of pupils.

The particular strength of the interview method is that it uncovers a wealth of information about individuals that can be used to illustrate the problems experienced by certain groups of children. Chapter Seven gave examples of typical responses given by boys and girls when choosing optional subjects; this chapter examines some atypical experiences. The first case is that of Karen, a girl whose subject choice was not typical of other pakeha girls. Both the reasons for her choice and the nature of the difficulties she encountered as a result of her choice are examined. This is followed by a study of six Maori pupils, four of whom were identified as 'losers' in the school system and whose responses were compared with those of two pupils identified as 'winners'. These cases were selected because information given by the children themselves in their interviews seemed to the researcher to be worthy of closer examination. Since personal details about the children were not given by teachers to the researcher at the outset of the study, reactions to children's comments were not influenced by prior expectations.

9.1 'Karen' - a study of atypical subject choice.

Karen (Ax 013g) was chosen as the subject of a case study because of her unusual option choices. She was the only girl in the total form two sample choosing metal and wood technology, and she was also among the pakeha minority choosing Maori language and culture.

Karen's mother, who was among the parents interviewed, gave a very full and frank account of her personal philosophy of education and her assessment of Karen's needs. The case study can therefore be examined in the light of parental attitudes and influence.

The family had migrated from England when Karen was about four years old and her sister was seven or eight. A younger brother had

been born in New Zealand, and at the time of the study the parents were share-milking on a farm some eight kilometres outside the urban area. At the interviews Karen appeared as a healthy, cheerful youngster with a pleasant smile and infectious chuckle.

The initial interview with Karen took place at her intermediate school (Ax) on September 27, 1982, and her mother was interviewed at their home on November 19. Karen's re-interview was held the following year on March 21 at 'A' High School. Transcripts of the interviews appear in Volume II, Appendix K, but it should be noted that a large part of the interview with Mrs Vincent has been omitted because of the very personal nature of the content. Karen Vincent's mother felt very strongly about the functions of schooling; she began talking before the tape recorder could be switched on, and continued after both sides of a ninety-minute tape had been recorded. Much of the material omitted from the transcript relates to her own schooling in England, and to her courtship and marriage, but in the following account parts of this material have been paraphrased where they are seen to be relevant to Karen's subject choice.

9.1.1 Karen's constructs - interesting and boring subjects.

Analysis of the first interview transcripts revealed that Karen viewed her future secondary school subjects essentially in terms of an interesting/boring construct, very closely allied to an enjoyable/not-enjoyable dimension. It can be seen from Figure 46, p189, that Karen made constant use of her interesting/boring construct and for her, 'interesting' implied 'enjoyable'. She explained that her mother had encouraged her to choose subjects that she really enjoyed:

> *I told Mum I enjoyed it and she said "Why don't you take it ... 'cos you really like doing it? Why don't you take something you really enjoy?" And, um ... I just took it because I enjoy doing it and she just encourages me.*

Why should Karen's mother be so concerned that her daughter should choose subjects she would be certain to enjoy, when other parents were stressing subject utility? The answer seemed to lie in Mrs Vincent's assessment of her daughter's personality:

> *You must keep the interest flowing. If you lose her, you've lost her for good ... She*

	INTERESTING ⟷ BORING (Not boring) (Not interesting)	
ENGLISH:	----------	I reckon it'd be boring.
SCIENCE:	I think it's interesting.	----------
MATHS:	----------	Sometimes it's boring.
SOCIAL STUDIES:	----------	I don't reckon that's very interesting I think it's quite boring learning about other countries.
ART:	----------	I'm not really interested in it.
CLOTHING:	It's interesting. --------	At this school I'm a bit bored with clothing 'cos I do it at home as well, and if I took it I think I'd get bored.
ECONOMIC STUDIES:	----------	I think I'd be bored stiff doing that.
FRENCH	It'd be interesting to learn a foreign language.	----------
MAORI:	It's an interesting subject.	----------
METAL AND WOOD:	It'd be... interesting.	----------

	ENJOYABLE ⟷ NOT ENJOYABLE (Liked) (Not liked)	
ENGLISH	----------	I just wouldn't enjoy it.
MUSIC	I love music. I just like getting pleasure out of knowing how to play something and it sounds good.	----------
METAL AND WOOD:	I really enjoyed doing it and I like making things.	----------
TECH. DRAWING:	----------	I just didn't like technical drawing.

Fig. 46 KAREN'S MAJOR CONSTRUCTS

> *needs to be active ... She's a clever girl and this sometimes goes against her. Once things get boring she just shuts off.*

This was reinforced, however, by the philosophy of education that Mrs Vincent had developed as a result of her own unhappy experiences as a 'late developer' and her consequent feelings of failure when young:

> *Let's face it, she doesn't have a choice whether or not she goes to school. She must go five days of the week, and I think it must be like a job that you're in. Once you begin to dislike it the least little bit, things grow and grow until you absolutely hate school. It's pointless sending the child, you know.*

and:

> *I think you should succeed in what you're doing, and let's face it, it makes you feel good about yourself if you can.*

Intuitively, Karen's mother had developed a notion of the importance of a positive self concept, widely stressed by educators today. Yet as a 'clever girl' why did Karen not respond as readily to classroom activities as other clever children from whom teachers may expect a positive response regardless of the activity? Again, Mrs Vincent provided a possible clue:

> *I never had much of a childhood myself ... and that's something I can give the kids. It's not going to cost me. You're an adult an awful long time.*

She saw her main task as one of providing her children with a rich and rewarding home environment:

> *It doesn't matter, you know, what the kid's interested in, right from babyhood .. the most unlikely things ... So whatever information I can give them about any small thing they're interested in .. because it's the strangest things children do sparkle at. And we all need to sparkle sometime, you know.*

She went on to give examples of the interests that she and her husband had fostered in their young son:

> *At the moment I've taken up embroidery, and the children will do this, even a little seven-year-old. You know, he'll say "Is it hard, Mum?" I say, "Well, I think this type of thing would be hard," but I'll find him something he can do in the embroidery line ... Or Dad's reading books on ... World War Two ... And they get a picture. It may not be very accurate, but it's knowledge.*

In doing this she saw herself as complementing the efforts of the school:

> *I was an adult before I knew how to go into a library and take a book out. We had no books at home. I wasn't taught that at school, and I was thrilled to think they're taught functionings of a library right from infancy in New Zealand. That even a seven-year-old will know how to select a book ...*

But she stressed that she in no way indulged her children. In an unrecorded part of the interview, Mrs Vincent explained how Karen had been given a saddle for her horse only after she had proved an interest by riding for a year without one. Karen had also cared for a stray budgerigar for some time before being allowed to purchase other birds to keep in the aviary which she eventually helped her father to build.

It is possible, however, that Karen's enriched home environment and the attention given to her by her parents made some of her school-work in the company of thirty or so others, boring by comparison. Karen said she enjoyed sewing, for example, but her mother explained:

> *She is good at it. She can do it, but she hasn't had much pleasure out of it at school because .. waiting in queues and things .. waiting to see teacher. One needs prompting every moment of the way.*

Although the interesting/boring construct was important to Karen in differentiating between subjects, she also considered subject utility.

9.1.2 Useful/not useful subjects.

Despite the fact that Mrs Vincent saw all learning as valuable,

there was an implicit notion of relevance underlying many of her statements about the school subjects, and Karen used a useful/not useful construct with reference to European languages and also to metal and wood technology. (See Figure 47 below.)

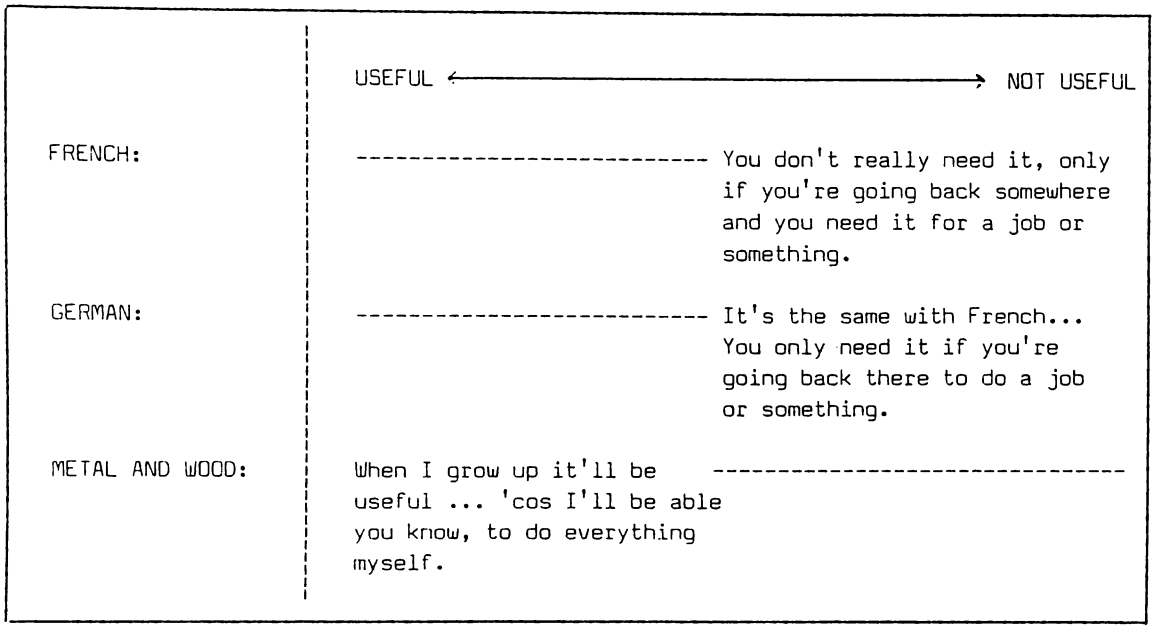


Fig. 47 KAREN'S USEFUL/NOT USEFUL CONSTRUCT

Karen's explanations suggested that she did not see such languages as French or German as being at all useful in New Zealand. Although 'interesting', these European languages would be worth learning only if she intended to work in France or Germany, and were thus viewed as a means to an end rather than an end in themselves. When asked about the core subjects, Karen used a similar argument with regard to social studies when she maintained that learning about other countries would not be very interesting unless you were "going to go there or have a job or something". On the other hand, metal and wood technology, which Karen categorized as 'enjoyable' in the light of her previous experience both at home and at school, were seen as generally useful. However, it is interesting to note that Karen's designation 'useful' related only to a subject's potential use in everyday life and not to a job-market value emphasised by many other pupils. Even science, which she recognised as directly relevant to her chosen career, was seen as interesting and enjoyable, rather than useful.

9.1.3 Karen's criteria for choice.

Karen's subject categorizations suggested that her choice would be related to the potential interest and enjoyment to be gained from the subjects offered and their perceived relevance to her future as an adult. However, this was not entirely the case. Figure 45, p189, showed how Karen rated the subjects offered to her using the criteria of enjoyment and interest, and notes the additional considerations that influenced her actual choice. Karen's comments indicated that interest and enjoyment for her were closely related to the kinds of activities she expected to encounter in a subject, and to her expectations of success. Karen mentioned that she enjoyed making things, playing the guitar and using a typewriter and these interests bore out her mother's contention that Karen liked to be active:

> *She must be doing. She's a doer. All the time ... every hour of the day she must be doing.*

Success appeared to make an important contribution to Karen's enjoyment of an activity. She said of her guitar playing:

> *I just like getting pleasure out of knowing how to play something and it sounds good.*

And with reference to typing she said:

> *I think it'd be nice, you know, to type letters and be pleased with it.*

However, she was not sufficiently interested in the activities she associated with art and technical drawing to sustain the effort that would be needed for success.

Although interest and enjoyment were important selection criteria, Karen also considered the context of learning. She felt, for instance, that although she loved music, this was something she could do out of school, she could learn to cook and sew at home with her mother, and her father could teach her technical drawing.

9.1.4 Karen's atypical choices.

The two optional subjects that Karen selected proved to be

atypical choices. Metal and wood technology was a popular choice among the boys, but not among the girls; Maori was popular among Maori pupils, but not among the others.

9.1.5 Karen's choice of Maori.

Karen's choice of Maori as an option cannot be viewed in isolation of her sister's choice of the subject, which in turn was the direct result of parental pressure. Their mother was evidently determined that both girls should learn about the Maori people. Mrs Vincent explained:

> *Well, we came into the country and I noticed that the children were actually frightened of the Maori people - physically frightened of them, to pass them in the street... if they had that very macho look with the leather jackets, their dark skins, and some that great big fuzzy hair. And they felt frightened of them. And I thought well, this is a thing that's not going to be cured by just mixing with them. There's always going to be a barrier, and I want to break this down. We're all people under the skin, you know. So we've encouraged it, and actually partially forced the issue with the older child, to go and take the Maori language.*

There were some initial difficulties with the elder daughter.

> *Tears and carry on for three weeks or more. She was terrified of the teacher. You know, just .. Oh, I suppose he started off on the wrong foot. She tends to be a bit meek and mild. He said: "If you can't say my name by the end of this week, you know, you're wasting your time taking Maori!" We talk about it, the way she used to shrink down at the back of her chair, you know, so that perhaps she wouldn't be noticed. And to the point that when he asked her a question, she would close her eyes to be able to answer.*

But with encouragement from home, the child persisted with the subject and her eventual success was marked by an award in the fifth form.

By the time Karen came to choose her high school options, she had apparently internalized her mothers views on the value of Maori as a subject, and since her sister now enjoyed it and was successful at it, Karen was quite happy to choose Maori. She said:

> *Well, I took Maori because my sister learns it, and she didn't want to at first, but then she thought that, you know, you'd learn a lot about your country. Coming from England I didn't know anything about New Zealand.*

When Karen was asked what she thought of Maori after having experienced it in form three, she made a very positive response:

> *Oh, well, that's good. We were on a trip last week and it was really fantastic, and it's the first time I've ever been on a Marae, you know .. a place like that, and it's good, you know. 'Cos my sister took Maori, and she's still taking it. I think it's her fourth year. And she can teach me. She's helping me along.*

The Maori teacher was now a young woman, and the class trips an enjoyable aspect of the subject mentioned by other pupils who were interviewed at the school. Karen admitted to finding the language "a bit hard", but with the prospect of help from her sister appeared to be looking forward to further study.

9.1.6 Karen's choice of metal and wood technology.

It has already been noted that Karen reported that she chose metal and wood technology because it was a subject she expected to enjoy and because she could see it as being generally useful to her. She was encouraged in this choice by her parents. Her mother said:

> *She's not really very good at sitting still for very long ... so we chose this as a practical subject ... to get a balance in her school week, so that she's not tied down to too much academic (work).*

Karen's mother was aware that Karen was likely to be in a minority of girls choosing metal and wood technology, but she explained:

> *We've always brought the kids up not to worry about being in a minority.*

Nevertheless, when Karen was re-interviewed in form three it was apparent that this had been a problem for her:

> *At the beginning of the year I was the only girl*

> *in the class, and all these other boys were a bit rough. And I was a bit scared and that, and I wanted to change to music or tech. drawing or something like that. And Mum was keeping .. trying to con me into it, and she rang up Mr ... and Mr ... and everybody, and tried to tell me what we were gonna do, and she said "Give it about six months trial, and then we'll see if we'll change you," and I did.*

It is obvious that Karen persisted with the subject only because of the encouragement and active intervention of her mother, who insisted that teachers at the school should be aware of Karen's purely social difficulties with the subject. In this way, Mrs Vincent was supporting Karen in the same way that she had supported and cajoled Karen's elder sister with respect to Maori.

Eventually, Karen also gained support from another quarter, interestingly enough, as a result of her Maori trip. She explained:

> *I've got to know .. from the Maori trip, I've got to know a couple of boys in the class and they help me with my work, and I'm getting along well now.*

Karen's experience in metal and wood technology and her sister's experience in Maori bear out Brown and Fitzpatrick's (1983) claim that social isolation can cause pupils to drop out of a subject. Karen's mother was not afraid to approach the school on her children's behalf; other pupils may not have this parental support.

Brown and Fitzpatrick suggested that staff should scan class lists for lone boys or girls and attempt to group them together in one class. Perhaps in the future this will be done at 'A' High School, but 1983 was the first year that a computer had been programmed to provide class lists and no distinction was made between boys and girls. The total subject roll showed that Karen was not the only third form girl to choose metal and wood technology, so that she could have been placed in a class with other girls.

9.1.7 Karen - summary and conclusions.

Karen was a child who had experienced previous difficulties at school which her mother attributed to boredom and frustration. It seemed likely that there was some link between this and the fact that

she had been constantly encouraged and stimulated at home. Because of her past problems, Karen's parents supported her in an atypical subject choice of metal and wood technology, which seemed to be relevant to the activities she enjoyed at home. Karen's mother felt strongly that her daughter should take the Maori option, and since Karen knew that her sister now enjoyed the subject and had achieved success, she was able to comply with her mother's wishes. Although it was found that Karen made an atypical subject choice mainly because her mother held strong opinions about what would be best for her, she was able to continue with the technical subject only because Mrs Vincent gave her support and was willing to intervene at school on her behalf.

Karen's experience suggests that parents, teachers and pupils all need to be encouraged to view the optional subjects in terms of the individuals taking them rather than in terms of stereotypes. Teachers in particular need to be made aware of the problems of minorities in classroom groupings and to be shown how to give support. Karen's problems occurred in a school which did not overtly discourage girls from taking workshop subjects, however. None of the form two girls in the 'B' High School sample chose woodwork or metalwork so a comparison could not be made, but the researcher found it interesting to speculate on whether the force of Mrs Vincent's personality would have been sufficient to overcome the prejudice of the 'B' High School Technical H.O.D. if Karen had been enrolled at that school.

9.2 Winners and losers - a study of six Maori pupils.

Of the total sample, four pupils (three boys and a girl) were judged for various reasons to be 'losers' in the school system. Since all of these pupils were Maori it was decided to compare and contrast their interview data with data obtained from two Maori pupils who appeared to be well adjusted and successful at school. The two well adjusted pupils, who were both girls, appeared to have a strong commitment to their Maori identity in contrast to other well adjusted Maori pupils who were identifiable as Maori by their appearance, but made responses that were not noticeably different from those of their non-Maori classmates.

9.2.1 The losers - Moana, Matt, Rangi and Bruce.

Moana and Matt (Bx2 015gm and Bx2 011bm) were first interviewed at 'Bx' Intermediate in October, 1982. Thet were re-interviewed at 'B' High School in March 1983. Rangi and Bruce (A4 013bm and B4 019bm) were fourth formers in 1982. They were interviewed at their respective High Schools in November of that year and again in March of the following year. For all four pupils, the major factors contributing to their lack of adjustment at school seemed to be social rather than academic, and for all four an important outcome was the severe limitation of their subject options to the point of their having little or no choice at all.

9.2.2 Moana.

When first interviewed at her intermediate school, Moana was not sure about what to expect from high school English, social studies or science, but said she liked maths ("adding and hard sums"). She also said she liked art, but in music it depended on what her teacher played. When asked to comment on the optional subjects available to her at high school, Moana rejected French and German in favour of Maori. She said:

> *I don't go round talking German and all this. I only talk Maori ... 'cos see, I'm a Maori and my father's a Maori and my mother's a Maori, and if I talk something else they wouldn't be too pleased.*

When interviewed, Moana had apparently not given any consideration to subjects other than Maori on the first option list offered at 'B' High School, and she knew nothing at all about either history or environmental studies. She had considered several subjects on the second list, however, and had asked her brother about some of them. He had told her something about typing and had shown her his technical drawing work, but he had dissuaded her from considering metalwork:

> *My brother said "You shouldn't take it (metalwork) because you won't learn nothing from it". ... He said that to me 'cos I'm a girl and he thinks it's for boys.*

Moana said she thought she would take art but was unable to choose a

second option, apparently because of her father's negative attitudes to the other subjects offered. Moana explained:

> *I said to my father if I could take home economics, and he said "No, 'cos I'll teach you cooking at home". I said "Oh well, can I do sewing?" He said "No, 'cos I can teach you sewing at home". And I go "Yeah, well, when I grow up I have to do sewing". He goes "I teach you when you grow up".*

Faced with a conflict between arguments, Moana, in common with many of the younger pupils coming to terms with their parents' views, began to rationalize her father's objections. She said she thought that perhaps her father was right about the cooking because:

> *See, we cook mostly Maori food at home, not Pakeha food.*

Although Moana's father had spoken of teaching her sewing and cooking at home, the researcher gained the impression that this was not necessarily something he would do himself. Indeed, there was a strong suggestion that the family held firm ideas about which activities were appropriate for men and women. This was conveyed through the comment about metalwork made by Moana's brother, and also through the father's response to woodwork which according to Moana was:

> *"Why learn woodwork when you come home and you don't need nothing."*

Moana seemed to have been convinced that apart from art, the options on list two were not suited to her needs, because she could learn them at home or because they were not relevant to her. She was therefore unable to finalize her options.

All the sample pupils were asked when they thought they would leave secondary school, in case this had any bearing on their expectations of school subjects. Most of the children said they expected to stay on until the sixth form, but Moana's reply echoed the the concerns of working class girls studied in England by Jackson and Marsden (1962):

> *My mother wants me to finish when I'm fifteen, but I want to carry on, 'cos it isn't fair. My*

brother's fifteen right now ... and he's allowed to carry on. And I want to carry on.

One difference between Moana and her brother was that he had a baby-sitting job that paid twenty dollars a week, and he was able to use some of this for his school expenses. Moana said that her two dollars pocket money per week was not sufficient.

Moana's interview revealed data characteristic of British working class girls (Reid et al., 1974; Jackson and Marsden, 1962). She had little knowledge of the subjects offered to her; she had a restricted view of the social and work opportunities that could be available to her in the future, particularly because she and her family had firm ideas about what was appropriate for a girl; and her school career was threatened by lack of money. As a Maori, Moana had the added disadvantage of being educated within an alien culture. When questioned, Moana claimed not to like school:

One reason I don't like school is 'cos teachers .. well, they always moan and moan. Oh, my teacher with me now, he gives me a hard time, and so I give him a hard time back. And I don't do any work or anything and he still doesn't care. So I try to make him angry. He, oh, he gets real mad, um, and that's one of the reasons why I don't like school.

When she reached 'B' High School the following year, Moana found that she had been placed in a home-room class and had been put down for the options taken by the other girls in her class: clothing and home economics. In addition, she was taking Maori. At her re-interview, Moana was apathetic about her core subjects and very negative about the options. She said of Maori:

I don't like it now.

And of clothing:

I just hated sewing. I hated the teacher, hated the work.

She explained that she no longer took the subject, but was sent to the Opportunity Room instead. This was a room where disturbed or disadvantaged pupils could be given special attention.

In retrospect, the researcher felt that Moana's lack of effort at school and her antagonism towards teachers, was due in part to serious problems at home. No mention of these was made during the interviews, but shortly after her re-interview at the high school Moana was taken into the care of the Social Welfare Department and transferred to a special school, reportedly because of severe ill-treatment and beatings by her parents.

9.2.3 Matt.

Matt's initial interview in form two revealed him as an eager, interested boy. He said his best subject was maths, he thought science was good fun, and he enjoyed rugby. When questioned about the options, he seemed quite interested in a number of subjects and seemed to favour Maori or environmental studies from the first group, and possibly metalwork and woodwork from the second group. Matt was under the impression that his father, who was away from home at the time, would have made his option choices for him on the enrolment form. This was an erroneous assumption, however, as the 'B' High School options were not selected at enrolment, but were due to be confirmed when school personnel visited the contributing schools.

The following year, the researcher established that Matt had been placed in a home-room class, and that he was taking the Maori, metalwork and woodwork options. At Matt's re-interview it was evident that his whole outlook on school had changed. He appeared sullen and guarded, answering questions with a single word, and behaving as though he had been called to the interview room for some kind of reprimand. He said that the core subjects and Maori were:

Alright.

But when asked about metalwork, the first half-year option, he said:

I don't really like it.

Matt was already in trouble with most of his teachers and appeared to be very unhappy at school. One can only surmise at the reasons, but it seemed likely that his home circumstances had contributed to an emotional upset. Matt was the adopted Maori child of a pakeha family. Shortly before he had entered high school, the

family had broken up and the natural children had moved away to live with their mother, while Matt had been left with his adoptive father. He was possibly not only suffering from the emotional effects of family break-up, but also undergoing a personal identity crisis. At this stage, Matt was taking the subjects in which he had earlier expressed an interest, but was undergoing increasing alienation from school.

9.2.4 Rangi.

At his first interview in November, 1982, Rangi explained that he was living locally with an aunt, but that his parents and brothers and sisters lived in Auckland, where he had first attended secondary school. When he was sent to live with his aunt, Rangi had attended another secondary school in the local area. He had only recently been transferred to 'A' High School where he was a fourth former, and was already in a certain amount of trouble. He explained:

> *My auntie makes me go to school. I only wagged once. So the only three days .. I missed the bus .. stayed home 'cos I was pretending I was sick, you know, 'cos I wanted to miss out something. I forget what it was. And I went to get some clothes on the Tuesday ... Got into some other trouble sometimes. You know, pinched some money out of a teacher's bag ... Paid it back ... and I was involved with some crackers (fireworks) just today.*

The researcher gathered that Rangi was staying with his aunt because he had been in trouble at home. Apparently his brother was about to follow in his footsteps and Rangi said:

> *My younger brother, he's a third former, he goes up there. He gets into .. amount of trouble that my auntie's planning to bring him down here.*

It was not possible to ascertain whether Rangi's changes of school had affected his attainment, or whether his lack of attainment was due to lack of ability or lack of interest in school. However, he mentioned problems in a number of subjects:

> *I like reading, yeah, 'cos I'm in, you know, reading help, but the writing it's no good.*

> *I'm gonna see (the counsellor) about maths ... He'll find me some help... I always sleep in science, sometimes. I slept once. All we do- there's lotsa work on the board. I just scribble it out in my books ... Sometimes I tell my mate (in social studies) ... I say "What does that mean?" You know, some hard words.*

Rangi had some difficulty in making his choices for the fifth form. He said:

> *I talked to (the counsellor) about my subjects. I told him they were hard, you know, that I couldn't do .. and he told me there were some easy subjects (Local) Maths, (Local) Science and other junk - things like that... So he ticked them off for me. And so I took (the form) home and I left it home, and I come back to school and the teacher wanted it, so I went home next day and I come back to school and I couldn't find it, so the teacher gave me one and I ticked them off.*

Rangi could not remember exactly which subjects he had ticked, but he knew they were the easy ones, except for English which was compulsory. His other subjects, verified at the beginning of the following year, were Maori, Local Maths, Local Science and social studies, which was subsequently changed to work experience. Asked how he came to take the work experience option, Rangi said:

> *Oh you see, Mr ..., I think it was, he goes "Which one would you rather pick, social studies?" 'Cos he couldn't put me in the social studies room... He says "You want to pick social studies or work experience?" And I said "What's work experience?" And he goes "Oh, it's employing - job - get yourself employed". I say "Oh yeah, I'll take that."*

Thus it appeared that some subtle pressure had been put on Rangi to change to work experience, but even though he had though this sounded interesting, it proved to be a little disappointing. When interviewed in the fifth form, he said:

> *We work out - every Wednesday. And, you know, just do work. They show you all around and you start doing cleaning up. But in my job I work at the butchers. And all they do is just tell me to clean up. They don't show me ... all the meats and that - what they are really for.*

Rangi's unsettled home life, his frequent changes of school, and his lack of success in most school subjects must all have contributed to his lack of choice in the fifth form. In effect, he had 'chosen' the only subjects he felt he could cope with. Thus for Rangi, fifth form subject choice paralleled the non-event experienced by low ability pupils described by Woods (1977). In his study of a streamed school, Woods found that none of the pupils chose non-examination subjects for positive reasons. In the present study, this was not always the case at 'A' High School, which was an unstreamed school, except for maths and science. However, Rangi had attended other secondary schools which graded pupils in classes. As he himself explained:

> *I just can't do it, you know, 'cos I haven't had these sort of subjects before... I done maths, yeah, but we were still on to the other books. The easier ones, you know.*

9.2.5 Bruce

Bruce was something of an enigma to the interviewer and also to his teachers. He showed none of the social inadequacies of Moana, Matt and Rangi, but had irregular school attendance, indifferent performance, and a general lack of motivation in his schoolwork. In contrast to other fourth formers in the interview situation, Bruce presented himself as mature, self-confident, verbally fluent and utterly charming, although he intimated that his behaviour was less desirable in some of his classes. Later, the guidance counsellor explained that Bruce was somewhat given to imaginative distortion of the truth, and that references to illness were not to be taken at face value.

For whatever reason, Bruce's school career was chequered by absences. Metalwork was one of the subjects that had suffered because of this. He explained:

> *I'm either sick or I'm not at school sometimes, most times, actually, so my metalwork gets, oh, either dropped or it's fallen down and thrown away or something.*

Bruce had also missed a good deal of the fourth form core economic studies programme. When asked if he had done any accounting as

part of this programme, he said:

> *No, not that I know of. Mind you, I don't normally come on Fridays. I'm normally sick or something.*

However, at his re-interview the following year, Bruce dropped his claim of sickness and said:

> *I wag a lot and everything. I don't like, you know, wagging, but oh well, I enjoy it, you know. I don't like the consequences.*

Bruce had been absent from school when the fifth form subject choices were made at the end of 1982, but at his interview he showed some interest in English, maths, science, economic studies and possibly geography. When he arrived at school at the beginning of the following year, he had apparently still not decided what to take apart from English and maths which were compulsory. When he was re-interviewed Bruce said that English was one of the few things he found easy, but that he had already been 'kicked out' of maths because of his unacceptable behaviour.

> *See, I got kicked out before, permanently, but I managed to get my way back in through vast apologising. And he, er, he let me back in. And then I was arguing with my class councillor, telling him he had to go to the meeting, and he said he wouldn't. And there was him and the secretary telling me to go, and I said "No", and then I got kicked out.*

Asked why he eventually took accounting in the fifth form instead of economic studies, Bruce said:

> *I just came on my first day at school. I walked in and sat down in the counsel office and thought to myself, well. I'll do accounting. It'll supplement School C. maths.*

By the time he was re-interviewed, Bruce had already given up geography in favour of history. He explained:

> *I went three times (to geography) and decided it was too hard for me, which it was. I couldn't do any of it... We started doing last year's School C. paper... then we were*

> *doing maps and everything. I can draw a map, might be a little off-scale, but I can draw a map. But it was hard, because I didn't understand half the words Mr ... was saying.*

However, Bruce admitted to enjoying history because:

> *We've got Mr ... and he's sort of a challenge ... Most of the teachers, I find it really easy to take the class from them, but not with Mr ... Our personalities are similar, and his is more so, being the teacher, you see.*

Instead of science, Bruce had eventually taken biology.

> *School C. science? No, well, I thought about it, and then I thought.. Oh, I think there was something. It was already overflowing or something.*

Again, as in Rangi's case, Bruce's lack of commitment meant that an option was changed in response to fortuitous external circumstances.

Despite his addiction to 'wagging', Bruce was keen to complete three years secondary education, which he had been told was a minimum qualification for some jobs. He had no particular ambitions for the future though he thought that School Certificate accounting might help him to get a job, and at the suggestion of a guidance counsellor had explored the possibility of hairdressing, or 'something in television". He said he regretted never having chosen typing or home economics. He was keen to learn to type because he enjoyed writing, and wanted to learn to cook because his hobby was eating. Bruce also regretted the fact that he could not take Maori at fifth form level because he did not have two years' previous experience. He claimed that he had been unable to take Maori in the third form because he enrolled late and there were already too many pupils in the class. Bruce said he had arrived at the school some time after the beginning of his third form year, and so, like Rangi, had been disadvantaged by a change of school.

9.2.6 The losers - common features.

How did these Maori pupils identified as 'losers' compare with each other? All four were having problems with their teachers, who

considered them to be disruptive and unwilling pupils. The problems of the two older boys, Rangi and Bruce, were no doubt aggravated by irregular school attendance in the past and/or changes of secondary school, but in all cases the major problems seemed to stem from outside the school. For Moana, Matt and Rangi, there was evidently an unsatisfactory home environment. These pupils were receiving little or no support from their parents, and in no case was this lack of parental support replaced by strong teacher support, although Rangi's aunt appeared to be supportive and concerned about his welfare. Rangi was also the only one of the four who was receiving some help with his school work, although Moana and Matt were possibly more able than their teachers suspected. It seemed likely that both of the younger children had been placed in a low-ability home room class for behavioural reasons, rather than because they were considered to be below average in ability. If this were the case, it is possible that the work would fail to interest them and contribute to the general apathy that was evident at their re-interviews.

Although Bruce had some hopes of passing his School Certificate subjects, neither he nor any of the other 'losers' was optimistic about the future. The younger children had really not thought about it. Rangi in form four expressed interest in a Christian co-operative he had heard about, but in form five he said he had registered with the Labour Department and hoped they would be able to find a job for him. All of the boys mentioned the possibility of being on the dole, and when asked what he thought his life would be like when he was twenty-five, Bruce replied cynically:

> *Well, the way Russia and America are going,*
> *I probably won't be!*

9.2.7 The 'winners' - Kiri and Doris.

Since all the 'losers' identified in the sample were Maori pupils, it was decided to compare them with Maori pupils who appeared to be well-adjusted and had also retained their Maori identity. Two pupils were selected from the sample, both of them girls.

Kiri (Ax2 020gm) was interviewed in form two at 'Ax' Intermediate School in October, 1982, and re-interviewed at 'A' High School in March of the following year. Doris (B4 006gm) was a

fourth former at 'B' High School when she was first interviewed in November, 1982. She was re-interviewed in the fifth form in March, 1983.

Both girls were very positive about their school subjects, and both chose to take Maori. Kiri said:

> *I'm choosing this one. Well, mainly I am a Maori, and my mother and father are urging me to learn the Maori language, and I like dancing, singing and doing the pois.*

Having experienced the subject at 'A' High School, she was very enthusiastic:

> *Maori, I'm really enjoying. It's thoroughly exciting, and I just love it. We've already been on a trip to the East Coast... and that was just full of knowledge, and it was just so, you know, it was really beautiful being with the other kids and that, and I've just come from a powhare, and after this I go back to R13 where we meet (a Maori visitor) and have tea, you know, just a morning tea. And, um, I think Maori is very educational, and everybody should take it up. I think it's beautiful.*

Doris saw her school studies in Maori as an integral and extremely important part of her life, and the success she experienced in this subject appeared to make a major contribution to her feelings of self-worth. In her first interview she said:

> *That's my main subject because of my religion, my blood. Maori, I find, it's really good... Tomorrow ... we'll probably have an exam and that's when it really does test my skills... So really Maori can be difficult at times, but then it's there to learn, and to pick up on your ancestors, religion, prayers, beliefs.*

At her re-interview, Doris said:

> *Maori's good. I like that very much. Last week we had a relieving teacher, and she was sort of a good omen for me, because I found myself .. Before, I couldn't .. I can't really get the structure right, but when she was there it just happened to pop out at the right time, and she was remarkably pleased. She couldn't believe it, and I couldn't believe it!*

In common with many other form two children, Kiri had not seen either French or German as relevant to her life. She said she had tried French at her intermediate school, but preferred Maori. Doris also said she preferred Maori, but in any case would not have been permitted by the option structure at her school to choose French as well. In retrospect, she said:

> *I chose Maori instead, but French, um, I was sort of downhearted about it, because I like the French language very much, and every time I see my teacher walking past, I speak Maori to her and she speaks French to me. People think we're nuts, because we're crazy speaking two different languages to each other. But I'd love to have taken that one.*

There were some major differences between the comments of the two girls about their other school subjects. Kiri, just starting secondary school, spoke almost entirely in terms of her own enjoyment of the subjects and her liking for her teachers. Doris's major concern, perhaps because she was considering the forthcoming School Certificate examinations, was with her own academic success. She judged her success partly from the approving comments of her teachers and classmates, and when she had problems was prepared to work hard to overcome them, given encouragement. (See Figures 48 and 49, p210 and 211.)

The interview data suggested that both Kiri and Doris felt very positively towards their classmates. Kiri identified with the rest of her class in music, social studies and science and said it was 'beautiful being with the other kids' on the Maori trip. Doris said something similar when talking enthusiastically about physical education during her first interview:

> *I just like the way the other kids communicate with each other, or helping if they know certain tactics of a certain game - they know what to do. They sort of help you out. They teach you.*

On the other hand, both girls looked forward to being independent when they were older. Kiri said she would like to get her U.E. before leaving secondary school, and then:

> *Probably go and look for a job, I suppose, and try to find me a place by myself, so I can have my own independence.*

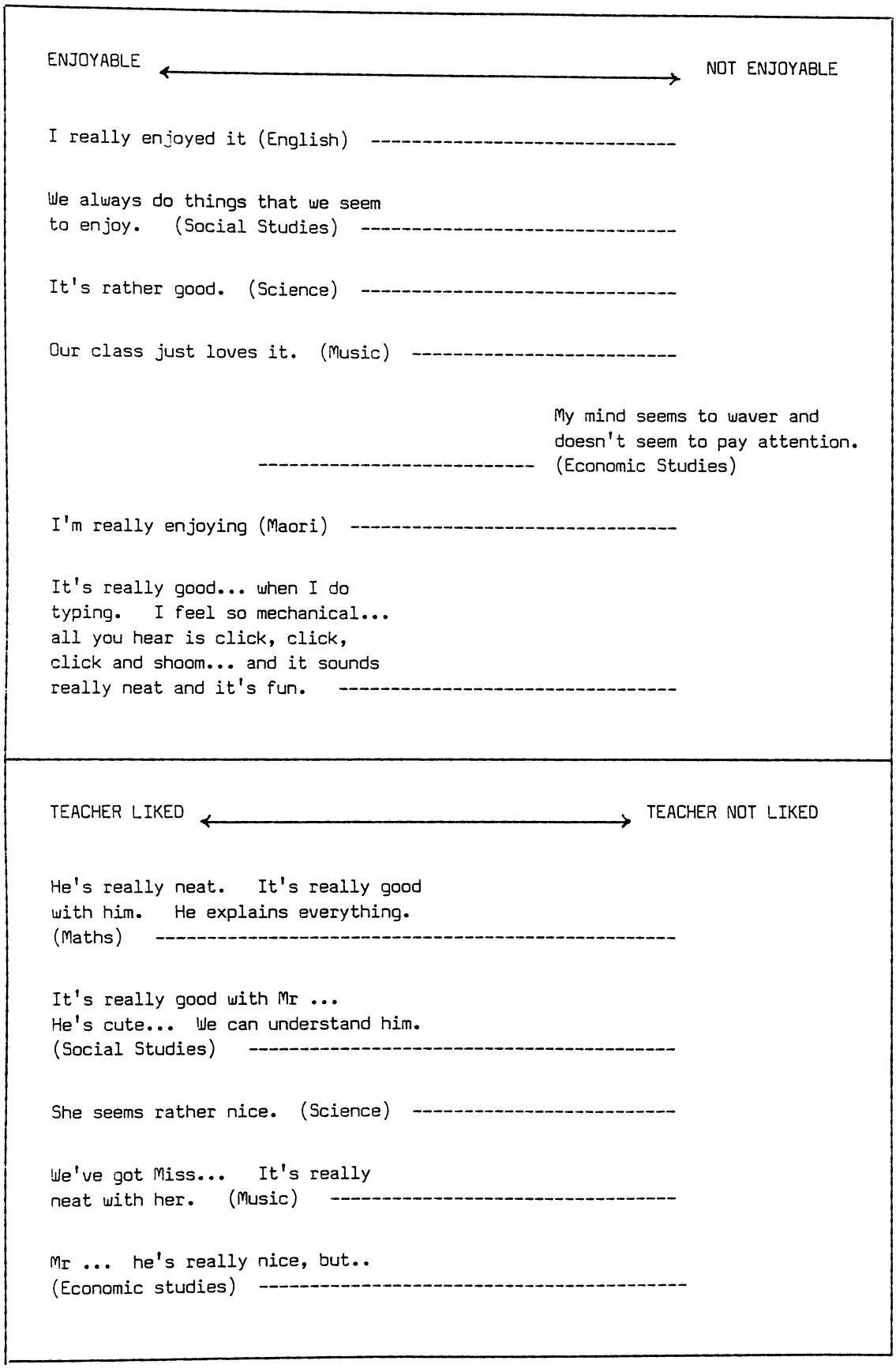


Fig. 48 KIRI'S MAJOR CONSTRUCTS

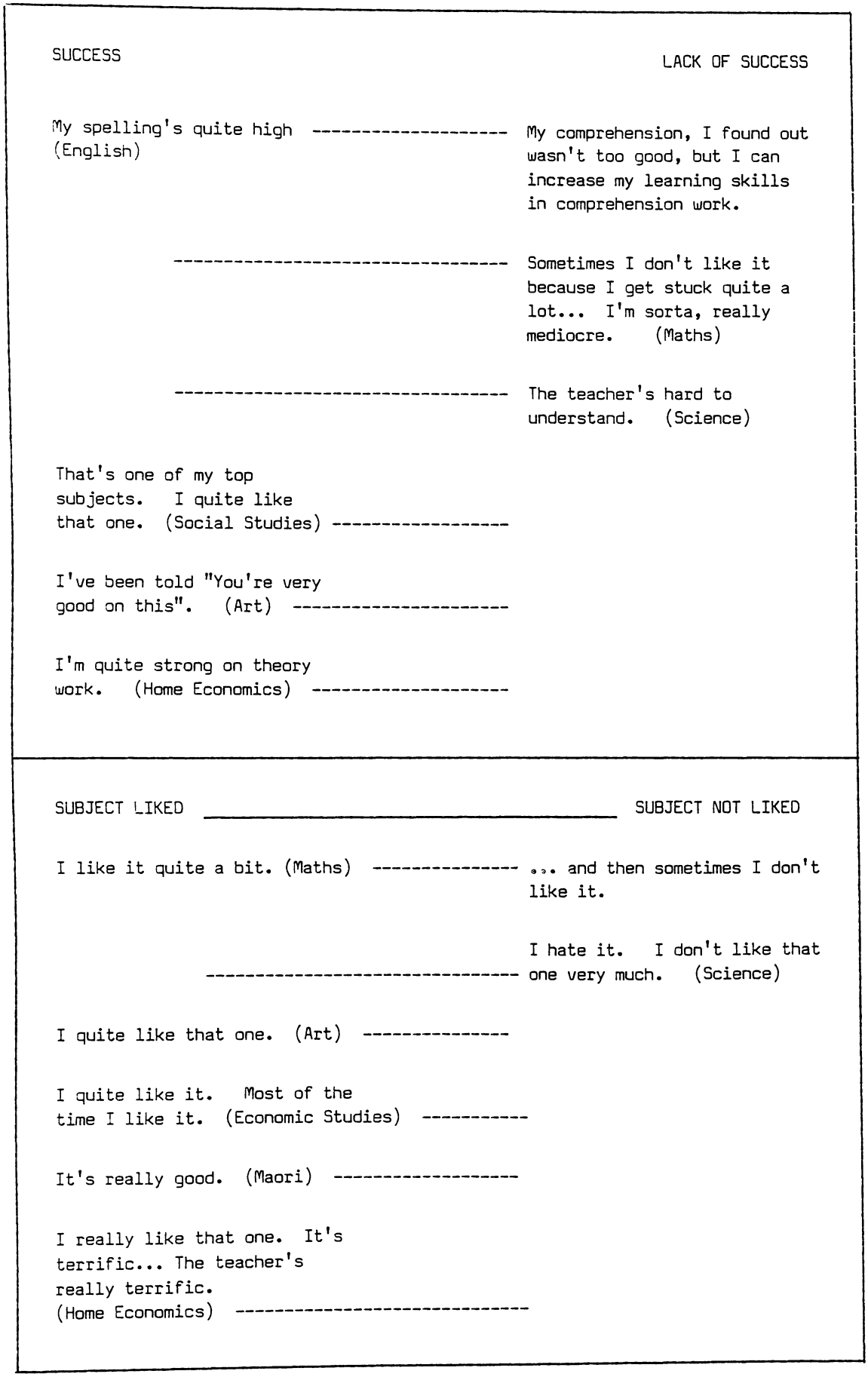


Fig. 49 DORIS'S MAJOR CONSTRUCTS

Doris also felt very confident about coping on her own:

> *If I have success in everything, I'll probably try to be single all my life. Um, sort of keeping the money for myself - not be a Scrooge or anything, but I think I would have a more happier life if I lived by myself ... I'd like to live with a male, but not sort of be .. sort of. a difficult relationship.*

Kiri described herself as being the youngest in the family and the only child left at home. She mentioned that her parents had advised her in making her subject choice, but were willing to let her choose. Doris mentioned a number of people outside the school who were interested in her progress and gave her encouragement in her studies. She said that her sister had told her about Maori and had advised:

> *"If you listen to the teacher, don't muck around, then you'd be prepared to do well in your fifth form."*

Doris said she was also encouraged in her Maori studies by the elders at her Marae:

> *They really helped me a lot by speaking Maori to me. In the morning, like, they would say "Tena koe ko tero". That means "Good morning, greetings my daughter, or girl". And they'd say in Maori "How are you?" And I'd say "Very well, thank you". It's just little things like that from my elders that push me as well... They say "You can do it; you can do it!"*

And in home economics, by an aunt:

> *My auntie, she's quite high in her cooking stages, she told me "The same thing as with every other subject: sit down.. really think about it before you do it. If you think you're going to make a stupid comment, then go back over and sort of work it out slowly.*

Both girls were very keen on sporting activities. Kiri said:

> *I love all kinds of sport. I love cricket and I like softball, netball, basketball ... all kinds of sports.*

Doris said:

> *My physical part, I would say, would be above average. I've had remarks on that, and complimented on last year and this year. I'm really good. I like taking certain sports that relate to myself. I like cricket, volleyball, basketball, rowing, squash.*

Both girls had experienced academic and sporting success. They got on well with their peers, were generally very positive towards their teachers, and had support from home. They also came from intact families and had experienced stable schooling in the past few years. Kiri had no future occupation in mind, but Doris had an ambition to join the police, and had been given information and encouragement by an uncle in the force.

Both Kiri and Doris were able to make reasoned choices from the optional subjects offered at their schools, although they differed from one another in the constructs they used to describe their subjects. Kiri spoke in terms of subject enjoyment and teacher-liking, while Doris, who was two years older, distinguished mainly between subjects in which she was achieving a measure of success and those in which she was experiencing difficulties.

9.2.8 Winners and losers - summary and conclusions.

The cases of the four 'losers' suggest that for at least three of them, major problems affecting school progress stemmed from home, and for all of them factors such as erratic attendance, consequent difficulties with school work, and confrontations with teachers, contributed to their problems at school. Moana was moved from her high school within two months of her arrival, Matt had completely rejected school within the space of six weeks, and the two older boys were just waiting to leave.

From the pupils' point of view, the schools had done very little to help these four young people. Moana was rejected because of her personal antagonism towards teachers; Matt was put in a low-stream class for behavioural rather than academic reasons; Rangi, given 'easy work' at a previous school, had little hope of coping at the fifth form level; and Bruce, though encouraged by a sympathetic guidance staff, was rejected by teachers.

The case studies suggested that despite the stated child-centred philosophies of the two high schools, teachers were rejecting individuals who presented particular challenges to their teaching of classroom groups. Both high schools had guidance counsellors, remedial programmes, and alternative programmes including work experience at the fifth form level, however, it may be that the extra support available for pupils with problems is just not enough to compensate for the severe disadvantages suffered by some pupils.

Features common to the two Maori 'winners' were strong support from home and a measure of success in the school situation. Both pupils felt positively about their classmates and their teachers. In neither case could the school be seen to have contributed in any special way to the pupil's success. Rather, school factors were likely to have reinforced the already positive self esteem of the 'winners' while serving to lower the already low self-esteem of the 'losers'.

CHAPTER TEN

CASE STUDY OF A SUBJECT

OVERVIEW: This chapter presents a case study of music to illustrate some of the subject specific variables influencing children's choices.

10.1 Music - a case study.

A case study of music was undertaken because of the special nature of the subject. It was the only subject available as part of the third form core as well as the option programme at both schools. It was also available to pupils in the form of instrumental tuition from itinerant school music teachers or from private music teachers in the community, and also through the children's participation in bands, orchestras and choirs both in and out of school. Because of the ready availability of music in a variety of contexts, children's attitudes expressed in their comments about music as an option were very different from those elicited from the interview data relating to other subjects. They confirmed the existence of an important selection category identified as 'context of learning'.

10.1.2 Prior experience of music.

Pupil's perceptions of music when they chose their third form options were no doubt coloured by their prior experience of music. It is therefore important to note the differences in music experience of pupils destined for the two high schools.

Both the 'Ax' and 'Ay' pupils had undergone an intensive practical music programme at their respective intermediate schools under the direction of specialist music teachers. All of these pupils had learnt to play the recorder, and over half of them (53.8%) said they had received tuition for an instrument other than the recorder, either at school or privately. Between them, they claimed some expertise on the flute, clarinet, violin, piano, organ, piano-accordion, guitar, saxophone, trumpet and xylophone. A number of the children also mentioned that they played or sang in community

orchestras and choirs.

In contrast, the 'Bx', 'By' and 'Bz' pupils had all learnt music as part of their regular classroom programme with their class teacher, rather than with a music specialist. The extent and nature of their music programme therefore varied according to the interest and expertise of the class teacher. Apart from some singing, the classroom programmes appear to have involved very little in the way of practical music, and according to the children, consisted mainly of listening to records and learning about the instruments of the orchestra and the lives of the great composers. This meant that, unlike the 'A' sample, these children did not have an understanding of classroom music that involved their own performance. However, just under a third of the 'B' sample (30.7%) reported having received instrumental tuition, either privately or from itinerant music teachers visiting the schools.

A comparison of the responses of the form two children in the 'A' and 'B' samples when asked "What do you think about music?" shows that the percentages of children expressing negative feelings about music were not markedly dissimilar (26.9% and 24% for 'A' and 'B' respectively). However, more pupils in the 'A' sample expressed very positive attitudes to music (53.8% as compared to only 28% of the 'B' sample). The majority of the 'A' sample, not unexpectedly, saw music as a practical subject, and most of those who were neutral or negative about it, said they were either uninterested or unsuccessful in playing music. Just under half of the 'B' sample (48%) felt that music was 'quite good' or 'alright' but had strong reservations about taking it as an option. (See Appendix D, p318-9.) Objections were to written work, singing and hard work. One pupil said:

> *I can stand it, but I'm not really rapt in it I enjoy modern music, a bit of Tchaikovsky's not bad, but as far as classical music goes, I'm not into that. I've tried playing a musical instrument before, but I got bored. (Bx2 012g)*

The data suggests that children involved in a practical music programme taken by a specialist music teacher are more likely to have positive attitudes towards music as a school subject than children who experience music as part of their normal classroom programme with

a non-specialist teacher. It also suggests that, in the absence of information to the contrary, children expect high school music to be a continuation of what they have previously experienced.

10.1.3 Choice of music as an option.

The startling fact about children's choice of music as an option was that the majority of those who acknowledged a keen interest and involvement in music did not choose to take it. In fact, of the more enthusiastic 'A' sample, only one pupil elected to to take the music option, and by the start of the following year even she had changed her mind. (See Figure 40, p161.) One of the children in the 'B' sample (Bx3 001b) stayed with his choice of music, another who thought he would take music eventually opted for technical drawing, but a girl who originally had been uncommitted decided to take music to supplement the flute lessons she had begun.

Mr and Mrs Selby, parents of Paul Selby, the boy who had stayed with his music choice, were very knowledgeable about the high school subjects as they had both been secondary teachers themselves. However, they claimed that they put no pressure on their son as far as his subject choice was concerned. They explained that Paul had developed an interest in music at quite an early age:

> *We offered him the chance at age seven or eight... to learn a musical instrument. Would he like to play the piano like (his sister) does, and he again was quite clear he wanted to do something different there, so we played him a few records and just asked him to listen to the sounds he thought he might like, and he quite liked the sound of the trumpet. That's where it started. (Mr Selby Bk)*

Later on, their son joined a local brass band.

> *In the band where he plays, there are quite a few older kids who have moved on to high school in the last couple of years and none of them have taken music as their option ... and the music teacher has expressed disappointment that these kids who were so good at music didn't take a music option. I think he was hoping to get something going with all the ones that are coming on from intermediate. We go on Thursday nights to band with one of these kids ... and he wishes he'd taken music after all ... so I think that might have helped, I don't know. (Mrs Selby Bk)*

Nevertheless, Paul Selby, like many of the other 'B' children, thought that the music option would include the kind of content touched on by his form two class teacher.

> *He was worried about the music option because he doesn't know anything about composers and he thought he might be expected to. And that was one of the reasons that was making him dither about taking it. (Mrs Selby Bb)*

More than half of the 'B' sample (56%) made ambivalent or negative comments when asked about music at the form two interviews. They mentioned a number of things that they disliked in music:

> *I don't like singing. (Bx2 004b)*
>
> *I don't actually like doing the written work that much. (Bx2 003g)*
>
> *Sometimes you get boring stuff like opera. (Bx2 007b)*
>
> *It's quite a bit of hard work ... alright when you've finished. (Bz2 002b)*
>
> *I suppose I could be quite interested if it was a bit more serious than it is here. (By2 003g)*

But the 'A' sample children who were ambivalent or negative about music (46.1%) gave reasons that related to their expectations of music as performance:

> *I only play the recorder. (Ax2 005b)*
>
> *I've never been in the orchestra group or anything. (Ax2 008g)*
>
> *You gotta practise and it takes too long. (Ax2 006b)*
>
> *I don't like playing things. (Ax2 014b)*

Children from the 'A' sample who were positive about music but did not choose to take it as an option showed that they were aware of the possibility of taking music in a context other than that of the classroom:

> *I'm gonna have lessons for my clarinet. (Ax2 001g)*

I play the violin. I'm up to a level where I don't really need to do it in form three as an extra subject. (Ax2 003g)

I play three instruments. I don't really need it. I've got my theory to do. I do grades too. (Ax2 016g)

I'll be going back to piano lessons. I don't really need to do music at school. (Ay2 003g)

I enjoy singing, but I can always do that somewhere else. (Ax2 017g)

Two of the 'A' pupils noted that they would be taking core music anyway, as did one of the 'B' sample, while others indicated that there were other things they would prefer to do:

There's two other subjects I want to take. (Ax2 009g)

I used to play the violin, but gave that up ... I liked playing soccer and things like that better than music. (Bx2 016k)

In summary, although 50% of the total sample expressed positive attitudes towards music in form two, most expected to continue their interest outside the classroom through instrumental tuition and involvement in choirs and orchestras. Only 8% of the 'B' High School sample chose music as an option in the third form; none of the 'A' sample took music as a third form option. However, although music was a minor option at both high schools, the subject was more popular as an option among the total third form intake at both schools than it was among the sample. Figures 12 and 13, p80, show that percentages of boys and girls taking option music at school 'A' were 6% and 7.4% respectively, while at school B, possibly because of the attraction of environmental studies for a large number of boys, music was more popular among girls (5.5% and 11.2% for boys and girls respectively).

10.1.4 Teachers' views.

The music teacher interviewed at 'A' High School about music as an option in the school showed an awareness of the fact that many pupils who were very interested in music chose not to take it as an option. She said:

> *The kinds of kids that tend to think of coming into the music options tend to be fairly bright, fairly academically inclined, and therefore they regard music not so much as a career type subject, but more of an interest/ hobby one, and they would prefer probably to keep it that way and thereby not lessen their chances in other subjects. They would do perhaps two languages in option rather than, say, do music in one of those. They would partake in all the extra-curricula music. (Music Af)*

She felt that this inevitably put a strain on the music staff:

> *The main problem is the fact that we're paid to do our job as music teachers in the classroom, and the extra-curricula is more like a necessary option that we have to do out of school time, and in effect what's happening then is that these kids who take languages as an option and expect to do all the extra-curricula things are expecting that we put a lot of our time and energy into out-of-school activities, and in a way I think they're probably just using the system ... There is a real conflict, too, as to whether children want to play their instrument or whether they want to go into things like the theory and the harmony and the history of music, and the sociological aspects of music, and therefore if they do wish to play, well, I suppose it is to be expected that they will just do the other things, rather than the options.*
>
> *... In a way we're being over-generous in what we offer to them in terms of the fact that we have, you know, a full orchestra, 80 plus, and besides that we've got a junior orchestra and a symphonic band and a brass band and a madrigal group as well as a choir ... and four or five chamber groups as well. The itinerant brass teacher takes the brass band, but apart from that, the two of us take it. So we are heavily committed in terms of before school and lunch time, and even some weekend work taking some of the chamber groups. (Music Af)*

The Head of the Music Department at 'B' High School, however, had noticed some differences in the expectations of pupils taking the music option in the two years he had been at the school.

> *At the beginning of last year, my third and fourth form option classes consisted of children who came along because they had an interest and they thought it would be fun - thought that I would be playing them Beatles and Split Enz and*

so on all the time, and I must admit I had to do a fair bit of that because I had to keep their interest going. Last year's third form option class virtually left me at the end of last year, but this year I've taken in a lot of children whose instrumental playing is going well, particularly brass players. We have a very enthusiastic teacher of brass here and he impressed on them how necessary it was to understand the rudiments and theory of music. (Music Bm)

Given the wide variation in expectations of music as an option that was apparent in the pupil interviews and also identified by teachers, it is unfortunate that little can be learnt from gauging satisfaction after choice in the present study. Only two of the 'B' sample opted for music. Of these, Paul Selby was pleased with his choice which he claimed gave him scope to follow his own interests, but the girl who changed her option to music (Bx3 002g) thought the subject a bit boring at times because the content was not even to do with music. It is possible, however, to examine some of the problems specific to music by examining pupils' reactions to core music in the third form.

10.1.5 Core music.

It will be recalled that core music was timetabled for third formers at both high schools, and that although only 3.8% eventually chose music as an option, 50% of the total sample expressed positive attitudes to music when interviewed in form two. More than half of these, however (61.5%), were pupils destined for 'A' High School, who had experienced lively music programmes involving their own performance at 'Ax' and 'Ay' Intermediate Schools.

Both high schools were equipped with specialist music rooms and staffed by specialist teachers, and both offered a wide range of extra-curricula music activities, but given the more positive attitudes to music among the 'A' sample, it is reasonable to suppose that attitudes to music at 'A' High School would be more positive than at 'B' High School among the third form samples. However, the reverse was found to be the case. (See Appendix G, p344.) Only 24% of the comments made by the 'A' sample about their third form core music programme were positive, while 44% of the comments were negative. Among the sample third formers at 'B' High School 48.1%

of comments about core music were positive and 22.2% negative. It is possible that more favourable comments were made by the 'B' children because they were comparing their high school programme with the non-specialist programmes in form two that many of them had merely tolerated or actually disliked. The 'A' children, in contrast, were comparing their high school experience with an intermediate school specialist programme that most had enjoyed. The different responses might also be accounted for by variables related to their teachers and to the content of the respective music programmes at the high schools.

What then, were the differences? Analysis of the re-interview transcripts showed that the children reported a very different content in the core music programmes at the two high schools. At 'A' High School, the children were generally dissatisfied with what they had done so far:

> *We're just talking about sounds and things like that at the moment. (Ax3 007g)*
>
> *Do more writing than music. (Ax3 005k)*
>
> *She just makes us write down a whole lot of stuff we don't usually understand anyway. (Ax3 008g)*
>
> *We just write about it. (Ax3 013k)*

However, the 24% who were positive were happy with the academic rather than practical approach:

> *She had this kind of computer thing, and you could scream into it and you could see the waves of your own voice. (Ax3 001g)*
>
> *We're learning a lot about notes and the composition of music and stuff, and that's really good. (Ax3 001k)*
>
> *We do things with morse code and stuff, and that's really good. (Ax3 016g)*

In contrast, the children at 'B' High School did not complain of too much writing:

> *What we've done so far is just listen to music and we've done some covers for records. (Bx3 005g)*

We don't do much writing or anything. We're just sort of listening to tapes and things and doing album covers ... and talking about the different instruments. (Bx3 002g)

These children were not expecting to play instruments, so they were not disappointed in that respect; They also appeared relieved that music was not full of the writing that many of them said they disliked, when interviewed in form two. Thus the emphasis on drawing, talking and listening was viewed positively. In addition, several children approved of the fact that they were allowed to bring their own tapes and records:

At the end of the period we can bring our own music along and listen to that. (Bx3 006k)

It's good because you can bring your own records and you can play them (Bx3 007k)

We do pop music, any music. We just bring tapes along. (Bx3 014k)

Vulliamy (in Esland, 1977, p30) has criticized school music for its "total disregard for the music with which students are most likely to be acquainted", but his criticism cannot be applied in this instance for, as has already been shown, the H.O.D. Music was well aware of the need to motivate pupils. Only one of the 'A' High School comments referred to being allowed to have requests, so it appeared to the researcher that 'bringing our own music along' was more of a feature of the 'B' High School programme.

Teacher variables seemed to be of minor importance. At 'A' High School, teachers were commented on positively by one pupil and negatively another, who may, or may not, have been referring to the same teacher. They said:

We have Miss ... Our class just loves it. It's really neat with her. She seems to pamper us, you know. We really like her. (Ax3 020gm)

Our teacher, she's a bit of a silly and we muck around and that. We don't get much work done. (Ax3 006k)

One other criticism appeared to be a reflection on the teacher:

It's not very well organized. The kids get away with murder. (Ax3 002g)

At 'B' High School, only one adverse comment was made about a teacher of core music:

In a way, she's sort of soft and lets us do anything, so we haven't done much work at all. (Bx3 013g)

More important to the children was the novelty, or otherwise, of the programme offered to them: novelty, in the sense of new material as opposed to 'things we've done before'. More of the 'A' sample claimed a high degree of musical knowledge in form two, but only two pupils from each sample expressed dissatisfaction due to repetition of work in form three:

We're going over a lot of stuff I already know. (Ax3 004g)

I haven't really learnt much, because we've done it before. (Ay3 002g)

We've just done the orchestra and we did that last year. (Bx3 010k)

That's fairly boring because Mr ... has to take the class through work we've already done. (Bx3 001k)

But this last comment referred to the repetition of work done in the music option rather than of work done in previous years.

10.1.6 Summary and conclusions

Music is a subject in which pupils reported a very wide range of experience prior to their entry into form three, some having received instrumental tuition to a high standard, while others had none at all. In addition, form two children had varying experience of classroom music. Pupils in the 'A' sample who had been taught by specialists viewed music as essentially performance, while pupils from schools contributing to 'B' High School saw music as an academic subject concerned with the instruments of the orchestra and the lives of the great composers. Music teachers at both high schools were aware of the varying needs and expectations of the pupils entering their programmes.

CHAPTER ELEVEN

PARENTS' VIEWS

OVERVIEW: Parents' comments on their children's school subjects are summarized and their wider concerns are noted.

Since parents' comments have been used to illustrate points raised elsewhere, and since only a small sample of parents was interviewed, this chapter will give a short summary of the major concerns raised by parents of form two children. In all cases, when asked to comment on the rôle of the school and the relative merits of the subjects offered, the parents referred to the particular needs and interests of their own children. They illustrated their concerns by reference to their own experiences at school and to the experiences of older sons and daughters. It will be recalled that form two children cited parents as their main source of information and advice about the school options. It was therefore expected that parents' views would closely match those expressed by the children and this proved to be the case.

11.1 Parents' attitudes towards the school subjects.

All the children as well as the parents were asked to comment on the core subjects as well as the options. Lack of space has meant that children's attitudes to the core have not been commented on in detail. It should be mentioned, however, that both children and parents accepted the need for core subjects and did not question the school's right to organize the curriculum as it saw fit (even though the two research schools had organized their programmes in substantially different ways). All of the parents in the sample agreed that the major core subjects (English, maths, science and social studies) were important for their children even though they knew that in some cases their children would not enjoy doing them. Mr Owen put his views quite strongly:

> *With quite a lot of subjects, you know, you might not specifically like them, but they are a necessary part of life ... you can't only do the enjoyable bits. There are bits that are not so enjoyable but they are equally as important... I don't enjoy putting the rubbish tin out but it has to be done!*
> *(Mr Owen Ab)*

Music was a minor core subject at both high schools and in attition, 'B' High School ran a core art programme. However, parents were not agreed on the value of art and music as core subjects. Mrs Clive was quite adamant:

> *As far as I'm concerned they're a waste of time. (Mrs Clive Bk)*

Mrs Green was tolerant:

> *I think that's reasonable enough, yes. Won't do them any harm. (Mrs Green Ak)*

And Mrs Ingold was generally in favour:

> *I don't think he likes either of those two very much, but ... I think it's good that they know a little bit about them. (Mrs Ingold Bk)*

Two of the children in the sample who were enrolled at 'A' High School had chosen to take art as an option, but for them there was no overlap as art was not part of the core programme at that school. One boy enrolled at 'B' High School had chosen music as an option but his parents did not think there would be any overlap:

> *(Core music is) probably extra to what they're doing in the full music class. (Mr Selby Bk)*

When it came to the options, there was a good deal of discussion about languages, and between them the parents reflected all the views advanced by children. Some of their comments have already been quoted in Chapter Seven, and it will be recalled that Mrs Trent, with four daughters at High School, took the view that languages broaden one's outlook; Mrs Clive and Mr Keane took a strictly utilitarian view and felt that their children would not need to know a foreign language. There was also a suggestion from two of the parents that even that if one did have the opportunity to travel the language learnt at school would be of little value. Mrs Owen said:

> *(Languages?) Well, I mean, alright, they're fine for people that want to travel - not that people in those sorts of countries can understand you once you learn them. (Mrs Owen Ak)*

And Mrs Clive went so far as to inquire:

> *The French they learn here is not the French they speak in France, is it? (Mrs Clive Bk)*

However, Mrs Keane mentioned a supposed advantage that had been referred to by girls in the pilot study but not by any of the children interviewed for the main research:

> *Several people told us you should have your child in a language class because you get a better class of teacher and a better class of pupil, and better teaching all round. But... I can't see any sense in doing.. taking a language simply to get a better class of friends. (Mrs Keane Ak)*

Thus parents comments about languages supported the finding that the children most likely to choose languages at secondary school were those whose parents were in favour of language learning.

The languages commented on so far have been European languages. Maori was also offered at both schools, and this was one of Karen Vincent's choices. Her choices are discussed in a case study presented in Chapter Nine (p187). Other parents saw Maori as perhaps quite interesting, but really meant for Maori children. Two parents had strong views:

> *I wouldn't like to see it die, but I don't ever want to see it as a compulsory subject. I would really kick up a stink if they made my kids take Maori as a subject. Some schools do. I mean, O.K. a little bit of it, but... Maori is no good to them anywhere else in the world. (Mrs Owen Ak)*

and:

> *O.K. I suppose as an option, but if it was compulsory I'd be most irate about it, because I think there's more important things. (Mr Clive Bk)*

These two comments from Pakeha parents, the former a British immigrant, are interesting in the light of the 'taha Maori' (Maori dimension) to be added to all school subjects following a recommendation from the

1984 Review of the Core Curriculum.

None of the children of the parents interviewed had chosen to take either home economics or clothing, both subjects being seen as something that is done at home. All of the children would have had some experience of cooking and sewing at intermediate school, and Mrs Green said:

> *The little bit they learn at intermediate seems to carry them through. They can sew on a button and that sort of thing. That's all they really need to do isn't it? (Mrs Green Ab)*

And Mrs Trent felt that she could help her daughter with sewing, as many of the children had suggested their mothers might do:

> *I do a lot of sewing myself. She probably feels she can do a lot with me rather than having to take it as a subject at school. She can take other things I can't help her with. (Mrs Trent Bg)*

Thus parents' comments supported the category of 'context of learning' elicited from the pupil interviews.

Several of the parents seemed proud of the fact that their sons did cooking at home, but some seemed to regard it as an emergency, rather than an essential skill for boys. Others thought that basic competence was important:

> *He shows an interest in cooking. He enjoys it and potters around here... This is something I encourage, I think. I think a guy should be as competent in the kitchen as what is considered to be the traditional woman's role. But not as a study course I don't think. (Mr Keane Ab)*

Mrs Green's comments suggested that she saw home economics for a boy as being a potential job skill, but not really necessary for everyday life:

> *If they want to be chefs or something it would be good, I suppose. That's another thing, they've had a little bit at intermediate... I don't think it hurts them.*

They only have two terms at it anyway. It's handy to have a boy that can cook a meal if he wants to. (Mrs Green Ah)

Mrs Owen used the same argument with respect to her daughter and clothing, a subject she felt boys would not choose at all:

We had a row about this last year when (our daughter) started... Unless a girl wants to go into a sewing factory , you know, or even become a designer or something like that... to me it's not a subject for school... I can't see many boys taking clothing at school, I mean only just from the ribbing they'd get from their mates. (Mrs Owen Ah)

Of the parents interviewed, Mrs Owen had the strongest views on what was appropriate for a boy and what was appropriate for a girl. She spoke of her daughter's subject choices:

She had economic studies and typing, and clothing was her third choice. But I mean, when you look at that, what - other than languages - what else is there for a girl? She's quite a good cook anyway, without - better than her mother. (Mrs Owen Ah)

Other parents suggested that what was best for the child was the most important consideration:

(Another daughter) took technical drawing in the third form with sixty boys and two girls... No, I don't think that matters at all. There's so few classes a week for it, and anyway it doesn't hurt them, does it? I think she can hold her own. (Mrs Trent Bg)

But two of the parents felt that the children were themselves prejudiced or subject to peer pressure:

He just wouldn't be able to overcome his prejudice, I don't think. Whereas prejudice in other things he could overcome, but I don't think he could in a language. I don't think he would ever find that interesting if it was forced upon him, for example. I don't think (he thinks) that's a man's subject. (Mr Selby Bh)

> *Probably their peers do have a bit of influence, because, you know, I think they steer off music and art and clothing perhaps - some of those type of subjects - because of their friends. They think they're sissy, you know. And then, they can't be different. (Mrs Ingold, Bk)*

These comments seemed to reinforce the researcher's finding from the children's interview data that peer expectations of sex-appropriateness were of prime importance, but that they were reinforced strongly in some instances by attitudes expressed by parents in the home.

Parent interviews also supported the finding from the pupil data that parents were more likely to offer strong guidance to girls, but to allow boys the freedom of choice. From the parent sample it was noted that in two families parents had insisted that daughters take a particular subject but had allowed their sons the freedom to reject subjects that did not appeal to them. Mr Owen said:

> *We put (our daughter) down for economic studies, and she's enjoyed it when she said she wasn't going to before she went... (Our son) didn't take economic studies. I would have preferred him to have taken it. He tends to be a different type of child... He had stewed over this for twelve months ... that he was not going to take economic studies. If it had come to the point of making him take it, I think there would have been an awful lot of animosity towards the thing. (Mr Owen Ab)*

In the form two sample more boys than girls claimed to have been allowed to choose what they wanted, yet since it was found that boys actually chose from a narrower range of subjects than girls, it was hypothesised that boys in the study had strong views about the kinds of activities that would be appropriate for their sex.

11.2 Parents' access to information.

Parents' comments, interspersed with frequent references to decisions made by older children in the family, bore out the finding that information gained from older siblings was crucial to the children's decision making. All of those parents who had older children made reference to them, but in one case where the boy interviewed was the eldest in the family, the parents (Mr and Mrs

Keane) were able to draw solely on their own limited background.

The parents reported in some cases that their children were encouraged or deterred by the reported experiences of their older siblings. Mrs Green's younger son, for example, decided not to take metal and wood technology because both his older brothers had had their woodwork taken from the school workshop, and Mrs Trent's youngest daughter was happy to take French, not only because her mother advised it, but also because her sisters had enjoyed the subject.

Sometimes older brothers and sisters were used merely as information givers, helping the child discover what was involved in a particular subject:

> *She's seen some kids in her class doing tech. drawing, for example, and said at the time she thought (her brother) would like it. (Mrs Selby Bk)*

This was possibly the most important function of older siblings, because as parents were aware, the children in each family often had very different personalities and needs:

> *No, it wasn't something (his sister) took, but ... he does quite like sitting at his desk and sort of fiddling with diagrams and bits of lettering and that sort of thing, and I can see him enjoying that. (Mr Selby Bk)*

11.3 Summary and conclusions.

Interviews with this small group of parents revealed that their views echoed the wide range of opinion given by pupils about their subject choices excluding those pupils who were completely uninformed about the subjects offered to them and whose parents had been unable or unwilling to assist them.

It was noted that some of the parents interviewed held a stereotypical view of the subjects most suited to boys or to girls, while others felt that the individual child's needs were most important. However, it was also noted that parents were more likely to allow their sons the freedom to choose, while insisting that daughters should take particular subjects.

The major aim of the parent interviews was to provide a check on the reported parental attitudes towards the children interviewed in the study, and it was found that the children of the sample parents had reported their parents' views accurately. It was also noted that there was generally a high degree of agreement between children's views and parents' views. A comparison of the comments made by Mr and Mrs Clive and their son (Bx2004b) has been included in Volume II (Appendix H) to illustrate this point.

CHAPTER TWELVE

TEACHERS' VIEWS

OVERVIEW: Teachers' comments are examined from the point of view of the major research questions outlined in Chapter Two.

In the matter of subject choice, teachers may be seen as the agents of the system carrying out policy decisions of the Department of Education and the government of the day as well as decisions made by the School Board, the principal and senior administrative staff in the school. In addition, however, each teacher has his or her own commitments and concerns which may influence the way duties are performed, and which have been shown in previous research to contribute to the hidden curriculum of a school (Sharp and Green, 1975; Brown and Fitzpatrick, 1983).

Analysis of the transcripts of interviews with teachers at the two high schools resulted in the discovery of 89 topics. These topics were subsequently ordered by a process of data comparison into seven major categories of concern. (See Appendix J, p364.) The categories ranged over a wider area than that covered by the present research, therefore this chapter will discuss only those concerns most relevant to the research questions outlined in Chapter Two. Question seven which asked "How do teachers view pupils' subject choice?" will be considered in terms of teachers' responses to categories of concern identified as having a bearing on the other six research questions which will be considered in the sections to follow. Comparisons with the views expressed by pupils will be made throughout.

12.1 Teachers' concerns about school mediation of pupils' subject choice.

Chapter five dealt with the formal constraints of the school option system. However, interviews with teachers revealed that in addition to these formal constraints a number of important informal influences were also being exerted by school staff.

Formal constraints were identified by teachers as being imposed by the school through the organization of the curriculum and through the allocation of time, money and staffing to the individual subjects. Formal constraints relating to the curriculum have already been discussed in Chapter Five, which noted the concern of the H.O.D. Art at 'A' High School about the absence of a core art programme at the school, and which also considered the effects of the introduction of history and environmental studies into the 'B' High School option programme.

The 'A' High School home economics teacher explained the problem of competition between potential core subjects:

> *The moment you want to put something else in you have to remove something. We've only got 'x' number of hours in the timetable.*
> *(Home economics Af)*

This teacher also summarized problems caused by options requiring three years of study leading to School Certificate, as against those requiring no previous experience from pupils. In particular, she felt:

> *Your strictly academic subjects, if you like to use that term, such as French, are still requiring three years constant core ... Language really does tie up the option system. We could be a lot more versatile if it wasn't for languages.*
> *(Home economics Af)*

This particular teacher revealed herself as being rather more child-centred than subject-centred, although she was of course arguing for her own subject against the demands made by other subjects. She said:

> *I think our education should be worked out as what is best for the child with the resources available. Sometimes I think we operate our option system to suit the teachers rather than to suit the children.*
> *(Home economics Af)*

The organization of subjects within the school was a particular concern of teachers of junior options with a fluctuating demand and to teachers of senior classes with small numbers. At both schools

subjects such as languages faced declining numbers in the senior classes, while others such as home economics, which could be picked up at any level, had an increasing clientèle in the senior school. Teachers saw administrative decisions as being concerned with viable class size, provision of staffing, hours available, place of subjects in the curriculum (core or option), and rules governing pupil choice.

Class size and staffing were allied problems; when few pupils chose a subject, decisions had to be made about the viability of the class; when large numbers chose a subject, there could be staffing problems possibly leading to the exclusion of pupils from subjects they wished to take. A teacher in the popular technical area at 'A' High School explained:

> *We've got two (fifth form) metalwork classes which are very full ones, 28 and about 30. Normally we do have two woodwork but there's a timetabling problem so we've only been able to manage to have one. We had up to 37 boys who wanted to do it and unfortunately we had to prune it back, so we've only just got the one class of about 30 in woodwork.*
> *(Technical Am)*

This teacher admitted that there was room for expansion in the technical department, but saw the staffing situation as a constraint:

> *It could expand if we had the staff, yes. We actually had five in our department last year and one fellow left - was appointed to another school, and we only really replaced him with a part-timer. So that's put us under a little bit of pressure. Another reason, perhaps, is that two of us in our department are deans and we have an extra time allowance for that which does over all the department cut down the number of teaching hours that are really available.*
> *(Technical Am)*

In contrast, the French teacher at the same school was worried about the decreasing size of her classes. She said:

> *It's very worrying because the numbers are very low. We're struggling to keep two classes going in the third form and this works through the fourth form too, because classes are very small.*
> *(French Af)*

Her counterpart at 'B' High School, however, commented on increase in the numbers of third formers taking French. This phenomenon, which was noted in Chapter Five, was probably due to the restructuring of the school's option system with the aim of producing this very result.

When asked how they restricted numbers in popular subject areas, teachers at both schools appeared to favour exclusion of pupils who made late requests and also those who, in the teachers' opinions, were not likely to be able to cope with the subject. A fifth form biology teacher at 'A' High School said:

> *Initially those people who had indicated last year that they wanted to take fifth form biology, they made up the class... and that included quite a few people that were doing science as well. Once the class was established we had quite a number of people subsequent to that who wanted to change to biology and they were refused.*
> *(Biology Am)*

The typing teacher at the same school explained how her fourth form shordhand/typing class was established:

> *This last year in the beginning of term three we gave every third form typing class two lessons on shorthand to see how they coped with it, as well as keeping up their typing. And out of those three classes we chose one shorthand class in fourth form this year.*
>
> *(Interviewer: You chose?)*
>
> *Well those that wanted to. And it worked out that those that weren't capable didn't want to anyway. We had a test at the end and it sort of worked out roughly. We encouraged a couple more we thought should do it to do it.*
> *(Shorthand/typing Af)*

Interviews with pupils revealed that they seldom, if ever, challenged teachers' decisions to exclude them from classes. Only one pupil in the form three sample (Bx3 013g) was eventually accepted in an option typing class, after having been informed by the school that she would have to take art instead of typing. Other pupils did not question teachers' reasons for excluding them from chosen subjects. One said:

I didn't change my mind. I did want art. I got clothing because too many people must have wanted art. (Bx3 012g)

This suggest that perhaps pupils and parents should be more ready to challenge teachers' decisions if they feel strongly about the changes that are made, and that teachers should make some attempt to consider what is best for individual pupils when deciding who should or should not be allowed to take a chosen subject.

Another constraint mentioned by teachers of practical subjects concerned the problems of budgeting. The availability of finance had an important effect on the types of activities that could be offered to pupils and also put some pressures on the pupils themselves to provide the extras not supplied by the school. The Head of the Home Economics Department at 'B' High School explained:

They have to provide an awful lot themselves because we can't afford .. You see, I did a little break down on our finances here, and I worked out that if each child who did practical home economics was provided with half a kg of flour - I didn't say butter and eggs, I took flour as being the cheapest - that would amount to over the year seventeen hundred dollars, and our budget is a thousand dollars and that includes clothing as well. (Home economics Bf)

The Head of the Art Department at 'B' High School faced a similar problem:

Our budget here is actually quite good, although the cost of things at the moment the way it's gone up, it's never enough. But I'm not going to complain about it. No, I've been pretty well treated. Paint has now become so expensive that even the pupils themselves in the option classes have got to buy their own as well, plus the fact that they use it for their own homework too, and that supplements what we supply here. (Art Am)

These comments, of course, reflect the teachers' views about what materials should be provided by pupils to supplement the school budget, but from the pupils' point of view it would suggest that those in low-income families may put the family budget under some

strain.

Some teachers were particularly concerned about the organization of class time. They mentioned problems which could, in some cases, affect pupils' perceptions of the subjects concerned. Economic studies at 'B' High School was part of the fourth form compulsory core, but it was timetabled for only one hour per week. A teacher in the Commerce Department explained :

> *The biggest problem from everybody's point of view is the carry over from week to week. It's very difficult. You tend to teach a whole series of one hour lessons rather than a continuous programme.*
> *(Typing Bf)*

In summary, it was found that teachers saw school mediation of pupils' subject choice in terms of the option structure and in terms of the specific constraints of timetabling and staffing with limited budgets presenting additional problems. All but one of the teachers interviewed appeared to see these constraints in terms of the organization of the subject rather than in terms of pupil needs.

When classes were over subscribed, one teacher at 'A' High School said he used a first-come-first-served criteria as the basis, other teachers, including mathematic teachers (as noted in Chapter Five), said they excluded pupils they thought has the least ability or were least likely to be able to cope with a subject. This occurred at both schools. Teachers of art and home economics were most likely to be expected to take pupils who had dropped out of other options and this meant that these teachers were likely to be faced with the widest range of expectations from pupils taking their subjects.

The strong emphasis laid by many teachers on the needs of their subjects, rather than on the needs of the pupils taking them, appeared to run counter to the child-centred philosophies expressed in the prospectuses of both high schools.

12.2 Teachers' concerns about how pupils gather information.

In general, teachers were not greatly concerned about how the third form pupils had gathered information about their optional

subjects. Only one teacher in the total sample mentioned giving information to parents and intending third formers by means of a school prospectus and through mounting a display at the P.T.A. meeting. This was the 'B' High School teacher in charge of environmental studies. No mention was made by teachers of other sources of information, although children's interest in several subjects such as languages, technical subjects and home economics was thought by some teachers to stem from the home, particularly from parents' occupational interests.

In contrast, a number of those who taught fourth formers mentioned having spoken to pupils informally about their fifth form subject choice. There was also reference to the formal means by which the schools informed pupils about the fifth form subjects, which have been described in Chapter Six.

Teachers comments about the 'selling' of subjects produced a category of concern unanticipated by the researcher as it has not been mentioned as significant in previous research. However, the active selling of subjects appeared to be confined to 'B' High School and in particular to the Social Science and Commercial Departments.

The issue was first raised by the teacher in charge of environmental studies at the school, who explained how he set out to catch the attention of prospective third formers at the school's open meeting:

> *I mount a bit of a display of pictures and things of volcanoes errupting and fires and earthquakes and that sort of thing, and that seems to grab them, and outline a few other things about the course in a handbook, ant that seems to sort of sway parents... It's really by selling it at the start that it's done. (Geog./s.s./env. studies Bm)*

The same teacher also put emphasis on the promotion of fifth form geography, another of his responsibilities at the school:

> *We get a high pass rate. You've got to sell the subject based on high pass rates. You see, if I can guarantee the fifth former an eighty per cent chance of passing that exam, I think that's a better chance than they've got with other subjects. (Geog./s.s./env. st. Bm)*

His reference was to a booklet produced by the school's Commercial Department and distributed to all fourth formers in their core economic studies classes. The booklet contained information about subject content in fifth form accounting, economics and typing, as well as a list of occupations relating to these subjects. However, it was regarded by members of the Commercial Department as merely a means of passing on information, although there had been a negative reaction from other teachers in the school to what they regarded as unfair competition.

It was very difficult for the researcher to discern what teachers felt was acceptable advertising of rival subjects, as opposed to unethical selling. The criterion appeared to be that any large and unanticipated swing towards a rival subject achieved as a result of advertising, must have been the result of pressure selling. Small scale year-to-year fluctuations were to be expected and generally tolerated, but even the phenomenal rise of economics and accounting at fifth form level was seen by one teacher as transitory. He said:

> *I think there is general disenchantment with the way this country is being managed itself - economically, you know - and economics is not the answer. And I think these kids, you know, do see that as being a factor. Jobs are not there... There's plenty of unemployed economics and management people. (Geog./s.s./env. studies Bm)*

Although two departments at 'B' High School could be considered to be engaged in active selling, art and music teachers at both high schools mentioned the need to maintain a 'high profile' through displays of work, concerts, and the like, in order to gain status and thus recognition in the eyes of the administrative controllers of finance and staffing. A history teacher at 'A' High School also made reference to the tug-of-war between history and geography at the local schools, and he showed the researcher a pamphlet produced by the History Teachers Association entitled 'The Great History Mystery', the purpose of which was to point out to pupils the advantages of studying history. However, he did not mention having promoted the pamphlet in his own school.

Plainly, teachers were faced with a dichotomy between the need

to safeguard their own subjects and the fear of unethical selling. One 'A' High School teacher felt that moderate selling would be acceptable:

> *I think it's ethical to tell the kids how they might benefit from a subject. I don't think it's ethical to over-sell a subject - in other words if you were to use sophisticated selling techniques. If I consulted a professional group of marketers and then got them into the school and then used their techniques, we could probably get extremely large numbers, but is that for the best? (Home economics Af)*

But a language teacher at 'B' High School was against the notion of selling subjects to intermediate school children. (It should perhaps be noted here that all these teachers used the concept of 'selling' quite spontaneousely.) The language teacher explained:

> *It would be professionally immoral to go down and do a heavy sell in any subject.*
>
> *(Interviewer: What if everyone went down and did a 'heavy sell', then would it be equal?)*
>
> *Yes it would, but I think it would be wrong, because then you are really accentuating departmental rivalries within the secondary school, and I think that's a bad thing. (German Bm)*

In summary, teachers generally did not see their rôle as informing pupils about the optional subjects before high school entry. In fact, some felt that this would be unethical. On the other hand parents had expressed a desire for more information from the schools and it was also obvious from the pupil interviews that many pupils were unaware of what to expect from some of the optional subjects offered to them. Clearly, there was a discrepancy here between the needs of the pupils and the expectations of teachers about their rôle.

However, teachers did accept the need to inform older pupils about the subjects offered at School Certificate level, and some were very actively engaged in doing this. Inter-departmental rivalry had developed at 'B' High School where fluctuations in subject demand were apparently being engineered by teachers in two major

departments.

12.3 Teachers' concerns about how pupils differentiate between subjects.

Teachers were generally concerned about the way in which pupils differentiated between subjects. However, most teachers emphasised the worthwhile skills and content offered in their particular subject areas, and also spoke of the intrinsic or long term value they felt the subjects to have. Teachers felt, in some cases, that third formers were not sufficiently mature to understand the long term benefits, and that also that some children had unrealistic expectations. Language teachers at both schools were of the opinion that some pupils were deterred by the amount of work required in learning a language. One said:

> *It seems to be the only area where kids are expected to learn something every day and be tested on it. They're expected to actually learn it and reproduce it, either orally or written. (French Bf)*

The slow progress made by pupils learning languages was also mentioned:

> *It really does seem to take ages for them to see any benefit from what they've done... They expect you to teach them to do almost anything you like in a foreign language in the first week. (French Bf)*

Another teacher said:

> *Children sometimes come with unrealistic expectations. They forget that a native speaker will have already had thirteen years experience and they have to catch up on that time. Boys, for instance, often think they are immediately going to understand the German captions in their war comics. (German Bm)*

It was clear from the data analysis that teachers at both schools identified strongly with their subjects and felt that the subjects each made a unique contribution to the school curriculum. There was also a large measure of agreement on subject value between teachers of the same subjects at the two schools. Although some individual values

overlapped those claimed for other subjects, the set of values attributed to each subject distinguished it from others.

Subjects such as typing, clothing, woodwork and metalwork were seen as giving pupils valuable personal skills:

> *Even if they're good sewers at home, we still get them at school because they like to learn new things - topics such as knitwear, which they wouldn't perhaps be able to work with at home, making their own sweat shirts and that sort of thing. (Clothing Bf)*

And others, such as home economics, were seen as offering important knowledge for everyday life:

> *I see home economics on a very similar plane that other people see social studies, as an essential component for living - not necessarily career oriented. I don't see it as getting a job. (Home economics Af)*

English and languages were seen as means of communication, though self expression was also seen to be important in English. A French teacher asserted:

> *First and foremost, language is a means of communication and the world is sunk if you can't communicate. (French Bf)*

While her counterpart bemoaned the conduct of New Zealanders abroad:

> *They can be very gauche and awkward, and arrogant, expecting that everybody should speak their language and they make no effort at all... It's something I see language teachers trying to combat. (French Af)*

The French teacher at 'A' High School also regarded her subject at a valuable academic discipline, while discipline of a different kind was referred to by the Head of the Technical Department at the same school:

> *Workshop subjects have an advantage in that they are structured and disciplined. Pupils respond readily to the discipline. They expect it and they like it. They know where they are. I think we have a*

big contribution to make to the school in that respect. Pupils don't expect it in all their classes, but they do in the workshops. (Technical Bm)

And history, it was claimed, taught logical thinking:

I get students coming back to the school and telling me how valuable they found their history. There was one girl, who was a nurse actually, who said the most useful subjects to her were English and history because they taught her to think logically. (History Am)

Geography, on the other hand, dealt with vital relationships:

I think (geography) is the only subject that really does deal with the world as such in terms of its relationships. And it's the only subject that deals with the world environment and habitat. It's got a special place I think. (Geog./s.s./env. studies Bm)

Teachers of technical subjects, and to a lesser extent English and languages, saw their subjects as giving pupils the opportunity to practise necessary skills. A technical teacher explained:

We work on the basis of a skills programme. The benefits which these children can learn, particularly in the workshops, as far as tool skills, machine skills and the use of materials, and general skills of construction, those are the sort of emphases we talk about. We don't put any emphasis on job orientation at all. (Technical Am)

And an art teacher at the same school said:

I think the first thing is to teach them to see. Now a lot of our kids use their eyes, but they don't think about what they see... so it really is to teach them how to see, and then to put their ideas down into some sort of visual form which they can get enjoyment out of. So then you start teaching them a number of sort of techniques or changes in media and things like this. And in art there is no one right answer. (Art Am)

In other subjects there was a greater emphasis on knowledge than on skills, but also an awareness that active involvement in learning is important in helping to motivate pupils. The H.O.D. Science at 'A' High School, in particular, was able to see his subject from this point of view. He said:

> *Science is examined now only on the fifth form year's work, so that means we have a lot more freedom in the third and fourth forms. We can do our best to make it exciting and relevant for pupils.*
> *(Science Am)*

In summary, the emphasis placed by teachers on the different content knowledge and skills pertaining to the individual subjects echoed the different criteria offered by pupils for distinguishing between subjects. Teachers tended to stress the intrinsic, rather than extrinsic, merits of their subjects, and only in the commercial area was occupational relevance thought to be an issue. This contrasted sharply with what had proved to be one of the pupils' major concerns.

12.4 Teachers' concerns about what criteria children use to choose their subjects.

Some teachers showed an awareness of some of the reasons for choosing subjects that the children had themselves expressed in an earlier part of the study. However, a number of the teachers' comments suggested that they rejected some of the children's reasons and felt that the children were not sufficiently experienced to know what was best for them:

> *You don't know when you're twelve or thirteen, thinking what your choice will be, what you're going to need when you're thirty, forty, fifty, in the way of a language... I think they're probably too immature to see some of the advantages, but unfortunately at that age - twelve, thirteen, is just about the last chance they have to learn a language by rote, by repetition... Later they can learn things by analysis and working things out, grammar rules and so on, but they're past the age when they can just mimic and get into good habits of speech.*
> *(French Bm)*

Other teachers felt that children had unrealistic expectations.

An accounting teacher said:

> *I think they think it's going to get them a job, even though they are told quite clearly that both economic studies and accounting at School Certificate level is not going to get them a job... I think that's why our numbers are increasing. They see it as a saleable commodity, and I'm afraid it isn't really. (Accounting Af)*

Several teachers mentioned high pass rates in their subjects as influencing pupils' choice, although only one girl in the fourth form sample used marks as a criterion for choice. The 'A' High School accounting teacher said:

> *We have an extremely high pass rate in this school in accounting, and I think they (hear) that from the year before. (Accounting Af)*

Pass rates were also mentioned in geography ('B' High School), history (at both schools) and art (at 'B' High School).

It was noted in Chapter Eight that pupils' attitudes to their teachers formed a major component of their satisfaction with choice. A number of teachers showed that they were well aware of this. One teacher at 'B' High School thought that pupils tended to choose their fifth form subjects, first on the basis of fourth form results, then:

> *The second thing they tend to do is choose their subjects based on the teachers. They say if teacher 'A' is taking that particular subject at fifth form level they're often game to give it a go. (Geog./s.s./env. studies Bm)*

A teacher at 'A' High School felt teacher personality was important. She said:

> *I used to teach all the fourth form and I think a lot of it had to do with personality. I got on with them, I could put the subject across, and I teach fifth form... I think teachers count a lot. I'm expecting, for example, our numbers to drop down drastically next year because we have two economists teaching the accounting. They don't like teaching it. They're not going to be that*

> *good at it because they don't like it, and I think that will reflect in our numbers next year. (Accounting Af)*

Music teachers at both schools also felt that teachers were important:

> *I suspect that many children choose a subject because they think they're being taught by a certain person who they've learnt to like and respect, and somebody who they feel is going to make the thing interesting and often something worthwhile. I don't think I've really had a chance to prove to many people here that I am or am not that sort of person, but generally speaking, my experience as a teacher has shown me that this is one of the most important factors in children's choice. (Music Bm)*

> *A lot depends on the personality of the teacher. ... It's probably easier here with two music teachers under thirty-five and relatively 'with it'. (Music Af)*

Other teachers spoke of the subject teacher's rôle in coping with mixed abilities (German Am), encouraging pupils (Home economics Af), giving explanations to pupils (English Am), and in helping pupils present their work to advantage (Art Bm). The issue of teacher as rôle model was also raised by two teachers at 'B' High School. The music teacher observed:

> *Many times I heard parents say to me "We don't know where our child got his or her skill from", and I'd say "Well, how did it start?" And very often I got the answer, "Well, it started in the primary school. There was a teacher there who was interested in music". Many times I found also that the child actually took up the instrument which that teacher played. (Music Bm)*

Another teacher at 'B' High School (German Bm) mentioned in an informal staffroom discussion with the researcher that the greater number of boys taking German in the school, as opposed to French, could be due in part to the sex of the teachers concerned.

In summary, teachers were aware of many of the criteria used by pupils in choosing their optional subjects, but rejected a number of them. Language teachers, in particular, felt that younger

children were often unable to appreciate the value of learning a language. Most teachers also rejected the criterion of occupational relevance. Teachers at both high schools claimed that high School Certificate pass rates attracted pupils to their subjects, but this factor was not mentioned by pupils.

Teachers' views about their subjects were often at varience with views expressed by pupils. However, several teachers recognised the importance of teachers themselves in influencing pupils' subject choice, and this was confirmed by the interviews with pupils.

12.5 Teachers' concerns about how the attitudes and experiences of pupils differ.

Two differing views emerged from the teachers' interview data: that the teacher's rôle was to cater for the variety of pupil needs in a class; and that the subject was really only suitable for those with particular ability. Some teachers mentioned both these points. For example, an art teacher said:

> *Art, generally speaking, has been looked on as being that subject which is often sort of tucked onto the timetable. They don't know what to do with these pupils because they're no good at anything else, so chuck them into art... They seem to think it is more of a subject for (a) those who are apparently gifted at it, or (b) if they can't do anything else, put them into art. But you've got to be intelligent to do art, just as intelligent as to do a language, or to do anything else. That's if you really want to be very good at it. (Art Am)*

A French teacher, who recognised that her subject was traditionally for the more able pupils, felt that a wider range of pupils should have the opportunity to learn:

> *I think that's a bad thing, too, the feeling that it's only for the élite. I think that's very unfortunate, you know, to think you have to be really brilliant to do it. That's not true. I don't think it's true, but you have to be prepared to work and to have a mind for detail, and you know, you do have to concentrate constantly, and keep solidly working. (French Af)*

There was some difference of opinion between those teachers who felt that everyone could and should learn their subjects (for example, home economics teachers at both schools) and those who felt that pupils should have some kind of ability or flair. Maths teachers at both high schools expressed this latter view; they both expected a certain amount of ability from School Certificate mathematics candidates and were not prepared to accept pupils who, in their opinion, could not cope with the work:

> *Even if the employer demands it, what's the point of them sitting something if they're going to get 15 or 20%? It means they know nothing about the subject at all really, and so we encourage them from the fourth form results and the teacher's recommendations. If we know they just can't make a fist of fourth form maths, they do (the Local Certificate). (Maths Bm)*

> *You have a person who's going to get 20%; an employer's going to laugh at that person. And not only that, if you've got a person of that calibre in your fifth form class - the fifth form class is sort of streamed because it's people who are relatively capable of getting School Cert.- it lowers your whole standard to look after these people. (Maths Am)*

It has previously been noted that sex differences in subject choice at the two schools were quite marked, particularly in technical subjects, home economics, clothing, typing, and to a lesser extent, languages. Other studies (Brown and Fitzpatrick, 1983; Abigail, 1982; McGrath, 1982) have suggested that teachers' own expectations help to promote sex differences in subject choice. In the present study, the majority of teachers who mentioned an imbalance in numbers of boys and girls in their classes seemed willing to promote their subjects as being suitable for both sexes, while accepting that there might be some differences in the background and/or expectations for the future of boys and girls. A French teacher at 'B' High School said:

> *Well, I think if any difference at all, boys tended to pick German and girls French. I don't know why. I suspect it was Hitler and the Second World War, but also perhaps they felt that German was more masculine.*

> *I really don't know whether there's anything in that or not... but this year... the boys in the third form numbers are right down doing French ... I don't know where they've gone. (French Bf)*

Her counterpart at 'A' High School suggested:

> *I think that's partly the emphasis on science and practical subjects that boys seem to be pushed into... the general expectation that boys will do practical things, and our New Zealand attitude that anything to do with culture, whether it's learning a language or singing in a choir... that is not a masculine thing to do. (French Af)*

Though in a minority, boys were apparently welcome in typing classes at both schools. The 'B' High School typing teacher said:

> *Last year we had two in fifth form typing; this year we have four, so our numbers are definitely expanding throughout... It's a start, isn't it? A lot of it is peer pressure - puts them off. Definitely. You know, the kids say, "You're doing typing? That's a girls' subject," and it does put them off... They've got to be a strong sort of person to do it. (Typing Bf)*

Boys were also welcome in clothing and home economics, although no boys chose the former as an option at either school. The newly-appointed H.O.D. Clothing at 'B' High School said:

> *When you look around, you see designers that are men; men that make suits and all this sort of thing... a lot of them are men... Now that I'm starting here I'd like to encourage boys to do it, especially at third form level. There's definitely a place for them to do sewing in the third form, in school and out of school. (Clothing Bf)*

The Head of the Technical Department at 'B' High School was another who perceived differences between the boys and girls he taught. Of technical drawing he said:

> *We get quite a few girls in technical drawing. They often do pretty well. It's all a matter of intelligence. We've had girls starting in form five and completing the work for School Certificate in just one year and sailing through. Girls are neat. They do well in the basic architectural drawing; they have difficulty with the engineering drawing where they have to draw parts that interact and work together. They have difficulty in vizualizing the machinery in action. Sometimes they can do the drawing, but lack the understanding. (Technical Bm)*

However, he was not keen on girls choosing the practical workshop subjects, and stated quite firmly:

> *I advise girls not to take woodwork or metalwork because strength is important in the use of tools. They can do the work but they find they have to go at a much slower rate than the boys and it's frustrating for them. If we had completely mechanized workshops, then the girls would not be at a disadvantage. (Technical Bm)*

Although the technical teacher interviewed at 'A' High School did not voice a similar opinion, he admitted that when girls ask to join woodwork or metalwork classes:

> *The only thing we do is ask them really whether they're sure that's what they want to do. (Technical Am)*

But of course this in itself emphasizes the fact that girls are not expected to take the workshop subjects.

It was evident from data gathered from pupils that boys at the two schools more closely fitted a stereotypical pattern than did girls, and from the teacher interviews it was noted that those teachers most likely to be promoting the stereotypes were male technical teachers. Nevertheless, the researcher, who has been actively involved in the professional training of technical teachers for some years, would not wish to generalize from this observation, particularly now that women have just begun to enter the field of technical teaching.

Among other differences between children, two teachers mentioned the particular problems of Maori pupils. The Maori teacher at 'B' High School referred to their extra responsibilities at home and to the possible shortage of money:

> *The majority of parents work - both parents work - and there's no-one at home, and the bigger ones look after the little ones, and that starts at an early age, at about ten. Which is terrible, really, when you come to think of a ten-year-old in charge of a household until mum comes back at whatever time... (School trips) cost a lot of money so consequently a lot of Maori kids don't go. They come to school and they say "I'm not allowed to go". And when you ring up the parents and offer some sort of assistance, then that'll be the first they've heard of it. Well, children are proud too, I suppose, like everyone else. (Maori Bf)*

And the English teacher at 'A' High School referred to some Maori pupils' disaffection with school:

> *The only kids we would find who are turned off are those who come in turned off, and it's usually family circumstances and the experience of failure, and it affects a lot of Maori pupils particularly. (English Am)*

Both of these observations were borne out by interview comments made by Maori children. which have been reported in the case studies presented in Chapter Nine.

In summary, there was a diversity of opinion among teachers about which pupils should take their subjects. Mathematicians in particular, at both schools, discouraged or prohibited the least able from joining examination classes. One technical teacher, at 'B' High School, actively deterred girls from taking woodwork and metalwork.

Some subject teachers relied on an influx of pupils dropping out of, or rejected from other classes, to augment their numbers in the senior school. Art and home economics teachers, in particular, said they catered for a wide ability range.

The personal philosophies of individual teachers were thus found to be crucial to the acceptance of some pupils in their chosen subjects.

12.6 Teachers' concerns about how parents view their children's subject choice.

Teachers' comments about parents fell into two groups: comments about parents' attitudes and expectations, and comments about parents as rôle models.

Language teachers felt that parents were instrumental in encouraging their children to take or not take languages, support or otherwise, depending on the parents' views about the value of learning a language. In discussing the effort children need to put into learning a language, teachers at 'B' High School explained:

> *I think it comes from the home. The children realize that it will take a lot of effort on their part to learn a language and they are encouraged at home by their parents. (German Bm)*

and

> *I think their attitudes are important (a) in making sure the kids actually learn the work and do the homework, and (b) what sort of education the parents want for their children. If parents just want them to get an education for a job, they drop their languages because they can't see them as being important or useful. (French Bf)*

It was also felt that parents' own experience of learning a language would affect their views:

> *A lot of them have fairly unhappy memories of their own language learning at school. They'll say "Well, you know, I never used it and I can't remember anything now," and they sort of forget that if they look at other subjects they've done at school, they probably don't remember any of them either. (French Af)*

However, the experience of Maori parents was unique in that they had

actually been prevented from using the Maori language at school. The 'B' High School Maori teacher, herself a Maori, said:

> *You see, when their parents were coming to this school, or any school for that matter, they weren't allowed to speak Maori, were they?... Now... all the parents want to take advantage of the fact that they're teaching Maori in schools. It's a thing that the parents want, not the children. Well, not in the third form, anyway. They don't realize. (Maori Bf)*

In some cases, parents' lack of understanding of school subjects was felt by teachers to be a problem, and this was confirmed by the comments made by parents. One teacher said:

> *We found... talking to potential third formers, form twos last year, that a lot of the parents didn't know what economic studies was either. They get a bit of confusion between home economics and economic studies, or else they know there's a difference, but they've no idea what economic studies is going to involve. (Acc./ec. studies Af)*

Parents as rôle models were mentioned particularly in connection with technical subjects when fathers were tradesmen (Technical Bm) and in typing when mothers hold secretarial positions (Typing Bm). The 'B' High School music teacher also felt strongly that musical interest came mainly from the home. This view was supported by the French teacher at 'B' High School who was discussing differences between boys and girls:

> *I don't know. It could be innate, but it depends who your parents are. Because I've got two boys and they are verbally very good, in English anyway. They're very sharp, but that's because they live with me, I suspect. We're all sharp. (French Bf)*

In summary, teachers accepted that parents' views were important influences on their children's subject choice, but some felt parents' views could be coloured by their own inadequate or unsatisfactory school experiences.

12.7 Summary and conclusions.

In terms of the major research questions teachers' comments revealed some important factors having a bearing on pupils' subject choice.

It was found that although teachers acknowledged that the organization of the school curriculum into core and options was determined by school administrative policy, which also controlled staffing, time allocation and departmental budgets, they felt that teachers themselves were able to exercise some informal power over pupils' choices. In particular, it was found that individual teachers' criteria for acceptance or rejection of pupils in their classes constrained the choices of some pupils.

From the pupil interviews it was established that information gathering was the first important step in the process of subject choice, but it was clear from the teacher interviews that most teachers were reluctant to be seen to offer information about their subjects to the younger children. Despite the fact that the research findings showed that these were the pupils most in need of assistance teachers viewed the dissemination of information outside the school as unethical. In contrast, some teachers were very actively engaged in persuading senior pupils within the school to take their subjects. Teacher actions had resulted in increasing demand for some subjects and had produced ill-feeling between departments at 'B' High School.

Teachers identified strongly with their subjects. They saw their own subjects in terms of a unique set of aims, knowledge and skills. However, they made only very general comments about how pupils might differentiate between the subjects. Teachers saw their subjects as offering intrinsically rewarding activities or in providing valuable skills for everyday living or for leisure. Most rejected pupils' assumptions regarding occupational relevance, and some felt that pupils' expectations of the subjects were inaccurate. A number of teachers felt that teachers themselves were important as presenters of their subjects and in influencing pupils' choice of those subjects. This view matched views expressed by many pupils.

Some teachers were seen to be subject-centred. These teachers argued for the exclusion of unsuitable pupils. Other teachers were

pupil-centred and showed a willingness to adapt their teaching to the varied abilities of the pupils who chose to take their subjects. Teachers remarked on differences between the able and less able, between girls and boys, and between advantaged and disadvantaged pupils.

Teachers tended to feel that parents in general had a limited understanding of the subjects offered at secondary school and that parents based their opinions on their own school experience. There was no evidence of any concern among teachers that parents should be better informed by the school about the subject choices facing their children, although home economics teachers spoke of a need for 'community education'.

In conclusion, teachers were found to hold a wide range of opinion on the matter of pupils' subject choice, but two issues were of particular concern to the researcher. These were as follows:

- Teachers generally did not accept the need for their involvement in the dissemination of information to children about to enter secondary school or to their parents.

- Informal avenues of influence available to teachers allowed individuals to exercise their own personal philosophies about who should or should not take their subjects, and thus to influence pupils' subject choice in covert ways.

CHAPTER THIRTEEN

SUMMARY AND CONCLUSIONS

OVERVIEW: The research questions are answered in the light of the research findings, implications of the research findings are considered and suggestions are made with respect to the possible direction of further research.

It will be recalled that the present researcher embarked upon this study of subject choice as a result of a personal interest in pupil motivation and from the professional viewpoint of a teacher trainer. Throughout the study the researcher was in constant contact with others working in the areas of children's learning (Freyberg, Osborne et al., 1981). These researchers and others following their methods have since amassed a great deal of data which points to the importance of pupils' prior understandings in any learning field because of the ways in which these understandings affect learning outcomes. The development of an 'Interactive Teaching Approach' from this research (Biddulph and Osborne, 1984) marks an important change of emphasis for New Zealand teachers, who are being called on to pay much greater attention to the needs of the learner, as opposed to the dictates of syllabus. It is therefore hoped that the findings of the present study will help teachers to see their subjects from the point of view of their pupils and to have some understanding of the kinds of attitudes that may influence pupils in different subject areas.

Two further important developments in New Zealand education have taken place since the completion of the present study. One is the unanimous call from teacher unions and other educational bodies for the elimination of all forms of racism and sexism from our education system; the other is the ministerial decision to abolish the University Entrance Examination (as from 1986) and to begin the revision of fifth and seventh form programmes in schools. The present study cannot claim to have validity across the New Zealand education system. It is felt, however, that by highlighting the problems of individual pupils, particularly girls and Maori pupils, the present research has a contribution to make towards a wider

understanding of disadvantage. The current revision of senior programmes in schools is partly in response to the claim that Maori and Polynesian pupils are disadvantaged by an overly academic and culturally biased senior curriculum. However, revision of the curriculum is likely to result in the proliferation of courses and a greater amount of pupil choice. The present study can claim to have uncovered some of the negative aspects of subject choice and, it is hoped, can suggest ways in which pupils could become better equipped to make the important decisions demanded of them.

Despite the above claims, it must be repeated that this study is a comparative case study of subject choice in two New Zealand secondary schools; other schools have different option systems, different staff and pupil populations, and possibly different educational aims. Findings of the present study can therefore be looked upon as context specific, but may well highlight the kinds of problems pupils also experience in other schools when making their subject choice, particularly those problems due to a lack of adequate information about the subjects offered.

13.1 Review of the research questions

Seven major research questions were framed in Chapter Two of the present study and it is now proposed to use the answers to these seven questions as the basis of a final summary. In the sections to follow, each of the research questions will be considered in turn. Some of the implications of the findings will be considered with particular reference to their significance for educationalists and suggestions will be made concerning the need for further research.

Q1 | HOW DOES THE SCHOOL MEDIATE PUPILS' SUBJECT CHOICE?

Both high schools were found to mediate pupils' subject choice by formal and informal means. Formal mediation at both schools included exercising discretion over how many optional subjects pupils should take, what range of options they should be offered and which subjects should be included in the core curriculum in addition to core subjects prescribed by the state. Thus, for example, school

'B', by means of its two-list option system, endeavoured to force its pupils to consider a study of languages, prevented them from having access to all three technical subjects, and was able to allocate more time to optional subjects offered in list one (languages, environmental studies, history and music) than it did to the practical subjects in list two. At fifth form level, school 'B' placed constraints on high-ability pupils wishing to take six subjects by requiring these pupils to choose at least one subject from a geography/history/music option. The consequences of such formal mediation were not always foreseen. For example, the school's two-list system, which according to teachers was intended to promote the study of languages, actually created a large demand for environmental studies. In contrast, school 'A' operated an open option system at both junior and senior levels, giving all pupils access to the options listed. At third form level an equal time-allocation was given to all options with the exception of metal and wood technology which consisted of a half-year course in each of metalwork and woodwork.

Perhaps most disquieting was the fact that 'B' High School allocated its pupils to ability levels on the subjective recommendations of primary and intermediate school teachers and then monitored pupils'access to the options on the basis of these presumed abilities.

Informal mediation took a variety of forms and occurred for a variety of reasons. At both high schools informal mediation was required to cope with the problem of over-subscription of certain classes. Strategies adopted by teachers to contend with this situation included rejection of late enrolees and pupils believed least able to cope with the subject. Mathematicians at both schools were likely to discourage the less able from taking School Certificate mathematics, and at school 'B' only able pupils were encouraged to take French and German. The Head of the Technical Department at 'B' High School discouraged girls from taking workshop subjects - a factor likely to have contributed to the fact that no girls in the school were taking third form metalwork or fifth form woodwork and fifth form engineering during the period of the study. Finally, the study indicated that at least two heads of departments at school 'B' were actively engaged in 'selling' their subjects to an extent that other teachers considered unethical.

Q2 HOW DO PUPILS GATHER INFORMATION ABOUT THE OPTIONAL SUBJECTS?

It was found that primary and intermediate school teachers gave the form two children very little information or advice about secondary school options. In some instances the children reported that their teachers made general enquiries about the subjects they were going to choose, but did not volunteer information. The exception was one mathematics teacher who reportedly introduced his form two class to basic skills used in technical drawing. However, a number of secondary teachers felt that primary and intermediate school teachers should become involved in giving information because they would be seen to be impartial.

Formal dissemination of information about the third form options at both high schools was by and large inadequate. 'A' High School did not provide any written information about its third form options other than a list of the subjects offered. 'B' High School gave explanatory notes in its prospectus about each of the options offered at the school, but these notes were not written in language easily understood by the younger children. No information was given in the prospectus of either school about where subjects might lead, about the availability of subject qualifications beyond school, about the necessity for pre-requisite study in some subjects, but not others, if they were to be taken at senior levels, or about alternative access to some subjects outside school.

Both high schools held meetings for the parents of intending third formers, but their emphasis was on induction to the schools rather than on subject choice. Children were also invited to attend the 'B' High School meeting, but many of those who could have benefited did not attend. The 'A' High School meeting was reportedly held after the children were required to confirm their subject choice. Secondary school teachers were generally of the opinion that the dissemination of information about their subjects to form two children and their parents would be unethical. Only one teacher (at 'B' High School) was found to be actively promoting his subject at this level. In contrast, senior pupils at both high schools were found to be relatively well informed by the school about the options available to

them, but at 'B' High School other teachers felt that two of the staff were promoting their subjects to a degree that could be considered unethical.

Parents, particularly mothers, were found to be the most import- and sources of information and advice for children about to enter form three, but of lesser importance to older pupils. Parents based their infomation on their own school experiences, the experiences of their older children, and on their general assumptions about the purpose of schooling and the needs of their child. The interview data suggested that mothers were more likely to put pressure on daughters to take particular subjects, but to allow sons to choose for themselves. Most of the younger children reported that their fathers were interested in their subject choice but did not influence them in any any way. A small minority of fathers was reported to have insisted that daughters take traditionally female subjects, such as typing, but there were no reports of fathers insisting that sons should take any particular subjects.

Pupils with older siblings were most likely to have accurate information about the options offered to them because they had been given information about the subjects by older brothers and sisters and in many cases had been shown text books and samples of work. Children were most likely to be influenced in their choices by same-sex siblings.

Most pupils mentioned having discussed their subject choice with school friends, however, peers were most frequently mentioned by older pupils. Younger children referred almost exclusively to same-sex peers. The younger children were also more likely to refer to information or advice provided by friends and acquaintances outside the school and to mention the experiences of cousins or the children of their parents' friends.

Some form two children had little or no access to information before making their subject choice. Reasons for this included: unavailability of parents or parental reluctance to assist, inability of children to understand written material provided by the school, absence of children from school when information was given out and when decisions were to be made, and absence of older siblings able to provide information about the school options.

Q3

WHAT CRITERIA DO PUPILS USE TO DIFFERENTIATE BETWEEN SUBJECTS?

Individual pupils used a range of personal constructs to differentiate between subjects. Constructs were applied to subjects as a result of children's direct or vicarious experience of the subjects and in the light of children's immediate and/or long term expectations of the subjects. Children's prior experience of the subjects and expectations from the home strongly influenced the ways in which they viewed the subjects. For example, Maori pupils were most likely to view Maori as a worthwhile subject, and children whose parents (particularly mothers) viewed European languages in a positive way, were more likely than others to mention the cultural value of such languages.

Pupils tended to use different criteria to differentiate between different subjects. For example, many of them saw art and music as developing personal interests, environmental studies as offering an interesting content, and economic studies as providing worthwhile skills for everyday life. The criterion of utility was more likely to be applied by younger pupils than by the older group, as was the criterion of sex appropriateness.

Q4

WHAT CRITERIA DO PUPILS USE TO CHOOSE THEIR SUBJECTS?

Pupils did not choose, or even consider, subjects about which they had no information. In some cases pupils 'chose' subjects to which they were directed by their parents who had strong opinions about the value of such subjects to them. In a minority of cases pupils were directed to subjects by teachers. Form two children choosing from 'B' High School's list one, fifth formers at both schools taking six subjects and pupils with low ability, poor attendance record or home problems, were most likely to say they had to take an option because it was the best available, rather than

because they particularly wished to take it.

There were important differences between the criteria used by older and younger pupils choosing optional subjects, mainly due to the form two pupils' lack of experience in a number of subject areas. Younger children used essentially affective or utilitarian criteria for choice, but were strongly influenced by the recommendations of parents and siblings. Form four pupils mentioned, in addition, subject specific variables such as subject content and perceived level of difficulty as well as teacher-related variables. Younger children were more likely than older children to mention the criterion of occupational relevance.

It was found that many of the younger children referred to the context of learning when discussing such subjects as home economics, clothing and music. This proved to be an important criterion for not choosing these subjects, to which children felt alternative access was available outside school.

There were important differences between the criteria for choice used by individual pupils which reflected parental attitudes towards the subjects. Pupils also used different criteria when choosing different subjects.

Q5 | ARE PUPILS SATISFIED WITH THEIR DECISIONS AFTER CHOICE?

For most children rationalization of choice began after the commitment to a decision was made, but a small minority changed their minds either before or soon after the commencement of classes. Changes in subject choice after initial selection tended to be in the direction of group norms, and option changes made after the beginning of the school year tended to be due to a subject failing to meet the pupil's expectations. A significant group of children, particularly at 'B' High School, found that their options had been changed by the school, but most children accepted without question the school's right to exclude them from chosen subjects.

Children who were dissatisfied with their chosen subjects

directed their dissatisfaction against the subject itself, the teacher, or their own performance, rather than against their choice of the subject.

Q6 HOW DO THE ATTITUDES AND EXPERIENCES OF PUPILS DIFFER?

There were marked sex differences in children's attitudes to technical drawing, woodwork, metalwork, clothing, home economics and typing. Younger boys were particularly stereotyped in their thinking about subjects they felt to be suitable for boys, and one girl who tried to break into a non-traditional area needed strong support from home and school to overcome the negative attitudes of classmates. A minority of parents and teachers strongly reinforced children's stereotyped thinking about subject choice, but boys' and girls' views about suitable subjects appeared to be more stereotyped than either parents' views or teachers' views.

Differences in home background had important effects on children's attitudes and experiences. For example, children whose parents or siblings spoke a European language were more positive about the value of learning French or German, and Maori children had more positive attitudes to learning Maori.

Children with negative attitudes towards schooling had the least understanding of the nature and content of optional subjects. Four pupils identified as 'losers' were characterized by their home problems, erratic school attendance, and frequent confrontations with teachers. These pupils had less choice available to them and were less able to exercise a choice than pupils who were better informed about the subjects and more successful in their school work. All of the 'losers' were Maori pupils.

Q7 HOW DO PARENTS VIEW CHILDREN'S SUBJECT CHOICE?

Although the organization of the option systems and the actual

options offered at the two schools were slightly different, all the parents interviewed were happy with what was offered at their local high school and accepted the school's guidelines and constraints without question.

Parents tended to view their children as individuals with particular strengths and weaknesses and to advise their children on the basis of assumptions made about the children's interests and abilities. They were more likely to coerce daughters into taking particular subjects, but to assume that sons would not respond to coercion.

Parents drew heavily on their own experiences in the school system in advising their children about the optional subjects, and they also referred to the experiences of their older children. Some parents felt that their children were not given sufficient information by the school about the subjects offered, and that some children could be disadvantaged by this fact.

Strong agreement was noted between parents' views and their children's views about subject choice, and this appeared to confirm the finding that parents were the most important source of information and advice for younger children.

Q8 | HOW DO TEACHERS VIEW PUPILS' SUBJECT CHOICE?

Teachers in general were subject-centred rather than pupil-centred. They were convinced of the value and importance of their own subjects, and a small minority promoted their subjects to a degree that others felt to be unethical.

There was a good deal of mismatch between teachers' views and children's views of their subjects, and some teachers felt that pupils were too immature to know what was best for them. Teachers were particularly concerned with high pass rates at senior examination levels which they felt would sell their subjects to pupils; however, pupils rarely mentioned the likelihood of their passing examinations.

Teachers were particularly concerned about the attitude of the school administration to their subjects. Teachers in small departments such as art and music were especially concerned about maintaining a high profile in the school in order to gain what they felt was an equitable share of the school budget. Many teachers were also concerned about class size and staffing, both of which could affect the viability of classes.

13.2 The implications of research findings.

It must be remembered that the present study is a case study of two schools in a particular location and at a particular period in time. However, teachers, school administrators and others concerned with education may wish to address a number of issues arising from the study. In the sections to follow some possible answers to four important questions will be considered.

13.2.1 Should pupils be allowed to choose?

The research showed that children and their parents accepted the core subjects as providing basic knowledge and skills for life, possibly with the exception of art and music, for which some felt particular aptitudes were required. It also showed that children responded favourably to chosen options which they saw as catering to their individual needs, interests and abilities. Nevertheless, patterns of choice indicated that children were strongly influenced by traditional thinking about sex-role appropriateness, which could limit their opportunities in a changing modern world. In addition it was found that some children lacked sufficient understanding of the school system and the subjects offered to make reasoned choices, and their parents were unable or unwilling to help them. For these reasons it could be argued that the school should play a greater part in directing pupils towards a suitable spread of subjects. However, the research also showed that the stated policy of a school, for example in encouraging the study of languages, could lead to unexpected consequences and it showed too, how teachers used covert ways to increase their clientèle and build up subject departments. These findings suggests that parents should not be reluctant to question the professional integrity of schools, and schools should be willing to dicuss their policies both among their own staff and with parents and the wider community.

13.2.2 When should pupils chose?

The present study found that many pupils were not well equipped to make choices before entering secondary school. If choices are to be continued at this level, then vastly improved systems of communicating information to pupils and their parents will have to be devised if any pretence of equality of opportunity is to be achieved. The research suggests that minimum procedures should be as follows:

1) The school prospectus should give clear and full information about all school subjects in the language of the child.

2) The school prospectus should clearly explain the implications of choices. For example, subjects with and without pre-requisites should be indicated.

3) Personal contact by secondary school staff should be made with all pupils at contributing schools well before their secondary school subject choices have to be made. Information given at school orientation sessions after subject choices have been made is of little value.

4) Intending pupils should not be required to state their subject choice at the time of enrolment. Time should available between enrolment and finalization of subject choice to allow the dissemination of information by the school.

5) Personal contact with parents should be made wherever possible. Alternative programmes, for example afternoon and evening information sessions, should be offered.

Since the research also indicated that older pupils lacked information about the subjects available to them and about the implications of their choices, it would appear that schools may need to look closely at the ways in which they provide information to pupils within the secondary school system.

Some secondary schools in New Zealand have already eliminated subject choice from their third form programme, offering instead a short course in every future option to every pupil. Naturally, this type of programme has implications for the total amount of time available for the study of individual subjects. New Zealand children do not enter the secondary system until they are on average thirteen years of age, and it is possible that later specialization could herald the demise of languages which are already under threat.

A more radical alternative might be to introduce more subjects at the form one and two level to give pupils experience of them before entering secondary school. This would have implications for teacher training because at present most intermediate school teachers do not regard themselves as subject specialists. It would also necessitate the introduction of form 1-4 programmes not at present operating. At the present time, if a pupil learns French in form two, he or she must begin the subject again in form three.

Another radical alternative could involve the packaging of subjects in the secondary, and perhaps also the intermediate schools, into basic, intermediate and advanced levels to be taken by pupils at any stage in their school career. This concept might well require the removal of present rigid adherence to age-specific groupings, but could allow pupils greater flexibility in their choice of curriculum. In particular, it could avoid the finality of choices based on stereotyped sex-role assumptions made at an early age.

13.2.3 How can stated school philosophies be monitored?

It was evident from the research findings that some individual pupils were poorly served in schools whose stated aims were to foster the all-round development of the individual. It was clear that administrative expediency frequently took precedence over the needs of pupils; it was also clear that not all teachers in a school were committed to the school's stated aims. These problems may be difficult to solve, but at the very least schools should designate a person or group of people to keep a watching brief on the implications and actual effects of administrative decisions. The researcher is also of the opinion that benefits could accrue from greater involvement between the school, parents and the wider community.

13.2.4 How can schools address the issue of equal opportunity?

It was a matter of deep concern to the researcher that all of the 'losers' identified among the sample pupils were Maori children. Access to information was found to be a key component in the decision making process, and it was plain that some Maori children and their parents lacked very basic information about the subjects offered at school. It was found that the Guidance Counsellors at both high schools were under a great deal of pressure and at times were working without the co-operation of subject teachers. This meant that few pupils were being given the assistance they needed from the school. There are no easy answers to this problem, which may well be a socio-economic problem rather than a racial problem, given that Maori pupils with support from their homes were found to be well adjusted and making good progress at school. Certainly schools cannot afford to ignore their stated aims to the detriment of clearly identifiable groups of disadvantaged children.

It was also of concern to the researcher that sex differences in subject choice should be so pronounced, particularly at 'B' High School, but since some of the sexist assumptions regarding subject choice were clearly coming from teachers as well as pupils, it may be that change will be slow to eventuate. However, the secondary teachers' union (N.Z.P.P.T.A.) is currently promoting a policy of non-sexist education which may eventually have some impact.

13.3 Directions for further research.

It has been noted that some secondary schools require pupils to choose optional subjects in form four, having sampled the range in form three. The assumption is made that pupils will be better able to judge the subjects in the light of prior experience, and this assumption is substantiated by the present research. However, there are other implications.

If pupils are to sample all future options they will be given only brief exposure to each. Will this exposure be sufficient to give pupils a real taste of the subject or will it be so brief as to mean that a recency factor will come into play (with pupils choosing to continue what they were doing at the end of the year rather than picking up something they did briefly at the beginning)?

Will the lesser amount of time available, particularly in skills-based subjects, result in the lowering of standards at the fifth form level?

The present study has also highlighted differences between the subject-centred and pupil-centred teacher rôle. It was found that children whose school work suffered as a result of home problems were likely to be less successful when taught by a subject-centred teacher, and possibly also when placed in a low-stream class for behavioural, rather than academic reasons. However, since the research suggests that the majority of secondary school teachers may be subject-centred, and in the researcher's own experience teachers find mixed-ability classes more challenging to teach than streamed classes, it appears that there is a need for action-based research in teaching methods designed to cater for individual differences, especially in mixed-ability classes.