

**Who, What and Why...  
Subject Choices for Senior Cycle  
in a Second Level School**

by  
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## **ABSTRACT**

### **Who What and Why...**

#### **Subject Choice in a Second Level School at Senior Cycle.**

The subjects that the students chose for study at second level have a long-term consequence on the qualifications they receive from their schooling and the careers they are in a position to contemplate. The aim of this study is to attempt to analyse what subjects are most commonly chosen, who is choosing these subjects and why they are opting for the subjects in question.

The methods used in this research are questionnaires and interviews.

The students are from an all girls secondary school, which eliminates gender as a variable in this study. However gender is discussed as a factor in shaping the academic self-image of the student. Similarly, as the school is in a middle class suburb and the students come from a relatively homogenous middle class background, class will be looked at only as a factor in shaping the aforementioned academic self-image.

The data and findings in this study are presented in the context of the current National picture and the current academic writing on the topic of subject choice at Senior Cycle Level.

## DECLARATION

I declare that this dissertation is all my own work and has not been submitted as an exercise for another degree in this or in any other University,

Signed : Anne Marie Guinan

(Anne Marie Guinan)

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Last, but by no means least, to my husband Robert Stewart, who ensures that I never walk alone, thank you for everything, I promise this is the end.

I would like to dedicate this work to the memory of my grandmothers,  
Madeline Guinan (nee Ryan) and Kathleen Lynch,  
a Lady and a Scholar.

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## INTRODUCTION

Choosing the subjects that one is going to study for the Leaving Certificate Examination is an issue for every student as they progress through school. It may be a very straight forward choice, between two similar subjects, from the same discipline or in the same area, for example between two languages or Art with design option and Art with craft-work option.

On the other hand it may be a far more convoluted choice between two disciplines, for example between Science or Business, or involving more than two choices. According to the Department of Education and Science Statistical Report 1998/1999 there are fourteen subjects, besides Irish, English and Mathematics, offered by more than fifty percent of the second level schools. Usually students are asked to pick just four option subjects from a extensive list and in doing so they are making a statement about their strengths, weakness, likes and dislikes and hopes for the future.

They can also be reflecting certain ideas that exist about certain subjects. These ideas are very hard to alter, one only has to consider the large number of programmes that have been introduced over the last number of year to encourage participation in some subjects, such as Physics, and still the numbers choosing this subject are disappointingly low.

More importantly students may be reflecting ideas that they have about themselves, about what subjects are appropriate for them to study according to their gender, social class or simply as a product of how they view themselves as students.

The last few years have seen unprecedented growth in industry and employment in Ireland. A selling point for encouraging the multinational companies, that have helped this growth, to come here in the late eighties was the high standard of education among the labour force and indeed amongst those in the dole queue. If growth is to continue we need to ensure that our youth are educated not just in the classical tradition, that will always have a place in education, but also in the new technologies and sciences, international languages and business, that will secure them work in the future.

The aim of this study is to look at the current situation, in one particular school, with regard to the subjects that students choose to study and their reasons for, and influences on, their choices.

To establish the context for this study I will first be examining the current academic writings and ideas on this issue. As part of the background for the research the national picture, with regard to education and the statistics on subject choices, will also be looked at.

A profile of the students and the school, where the study was conducted, are included, as this further establishes the context for the study. Also included are the methods of research and the rationale behind using these methods in this study.

Last, but by no means least, the results of the research are analysed to investigate if, at the start of a new century, students in second level schools have internalised the values of the dominant culture and are conforming to the anticipated roles that exist for them. Or are they prepared to challenge the expectations of previous generations, to challenge the role that society has designed for them, and to boldly go where no student has gone before.

## LITERATURE REVIEW

### Introduction

The aim of this chapter is to review the current academic writing on the factors that influence students, and the choices they make, in second level, particularly with regard to the subjects they choose to study. The choices that students make have a profound impact on the long term consequences of their schooling. With this in mind it is perhaps surprising that there is comparatively little research data available on this specific topic. There is however a lot of research available on the on the factors that shape the student's self image and this in turn impacts on the choices they make. Some of these factors will be examined in the course of this chapter.

If one considers students' time in school as the period of their lives when they are given the knowledge and the skills to actively take part as an adult in society, then education is not simply a process of transmission of knowledge, but will have long term implications and consequences for their socioeconomic positions in society. The subjects that students study as part of their education can influence the effectiveness of that resource as a tool for social mobility. It can affect the third level courses that they are eligible for, or are in a position to consider studying. Subject choices also open up, or restrict, jobs and careers that are available to the student, or perhaps more importantly that they consider for themselves.

The majority of students in Ireland complete second level education, according to the Department of Education and Science Statistics for 1998/1999 the percentage of seventeen year olds (17 on the 1st January 1999) enrolled in full time education is over 80%. (p.7) Traditionally Irish Society has placed high value on that education and the final qualifications received as a predictor of future status and earning potential. The subject choices that a student makes has a direct impact on the quality of that final qualification and therefore is hugely important.

## **Socialisation**

The individual student does not choose subjects for study in a vacuum. That child is part of a family, a school community, a wider community and will be affected by all these factors. Therefore while it may seem at first glance that a student has a completely free choice when it comes to the subjects they wish to study they are, in fact, already responding to expectations and norms within their family, school and community.

The process of adopting gender appropriate behaviour begins early in the infant's life. Studies have shown that mothers stimulate and give more attention to male children. (Hunt, 1974) Children are given toys considered appropriate to their sex. They are dressed differently, girls in pink and boys in blue, making it inevitable that adults will recognise and react to the infants on the basis of their gender. As children develop and acquire language they become aware of labels that are attached to certain sex appropriate behaviour e.g. 'sissy', 'tough', 'sweet', 'nice and quiet' and the higher status attached to masculine as opposed to feminine ones, 'tomboy' as opposed to 'girlish'. They also become aware that aggressive behaviour is tolerated and even encouraged in males but not in females.

Girls are expected to be more obedient than boys. Boys are expected to be more self reliant and independent than girls (Hunt, 1974, p.18)

Socialisation along gender lines is not the only aspect of this process. There is also behaviour that is deemed appropriate for children according to their social class or ethnic background. From a young age children, in their desire to please, adopt and develop behaviours expected of them.

This process of socialisation will dictate their reaction to, and place within, the dominant culture of society, which in the western world is generally white, patriarchal and middle class.

## Chapter 1

Schools, as part of society, also promote white middle class values and place certain expectations on the students as members of that society. Teachers, as educational successes within that culture, will carry those values and have certain expectations of their students, and these shape the classroom dynamics and interactions.

One cannot dismiss the impact that these factors have on a student. Since the age of four most children have attended school on a regular basis and have become socialised into the culture of that institution. The role they see for themselves within education cannot help but be influenced by the role the teacher and the school sees for that individual. The student is also a member of a broader community and, as the child gets older, he or she is also influenced by the expectations and anticipations of the wider society in which they and their family live.

Socialisation is defined as the process by which an individual learns to be a member of his or her society...learns patterns of thought and behaviour considered acceptable.

(Measor, L., Sikes, P., 1992, p. 8)

Two factors of Socialisation that will be looked at in greater detail here are gender and social class. These can influence how the student is viewed, and how they view themselves, and subsequently the choices they make and expectations that are held for that student.

A number of aspects of pupil background, in particular, gender, social class and age, have significant effects on educational outcomes.(Smyth, E., 1999, p.215)

Thus any discussion of the seemingly “Free choices” that students make with regard to their education must take into account the influence of these factors.

### **Gender: Impact and Consequences of Gender on Subject Choice**

The long-term importance of the subjects chosen by students is acknowledged in many different publications. The Report of the National Education Convention states that the issue of subject take up, among other factors, was important in the promotion of equality within schools.

Examples of good practice include such things as positive intervention programmes to encourage girls and boys to take up “non traditional” subjects (p. 118)

Breen and Hannan in “Gender in Irish Society” (1987) also acknowledge the important implications of subject choice for the student. They write that the third level courses followed by students have clear labour market consequences, with boys dominating in the areas of scientific and technical study, and the roots of this differentiation in qualification lie within the, often much earlier, choices made by the student.

...they may be asked to make subject choices very early in their post primary careers which will have important (but possibly unrecognised at the time) consequences for the kinds of subjects they may wish subsequently to take.  
(p.37)

The origin of these choices also have their roots in much earlier processes of socialisation, as already discussed, and explicit and implicit assumptions and demands placed on both sexes.

This process starts very early on in a child’s life so that by the age of three 80% of children know which sex they belong to and have learned behaviours that are deemed appropriate to that sex. (Hunt, p.18) This process continues in Primary schools where “teachers still unwittingly reinforce the distinction between boys and girls”. (European Commission, 1985, p.7) Upon leaving Primary school the students will be asked to choose the subjects they wish to study for the Junior Cycle at second level. The perceptions that students have as to how appropriate a particular subject is to their sex and social class is an important factor in the decision making process.



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The labour market consequences of subject choice in second level, mentioned by Breen, above, are echoed in a survey conducted by the Technology Awareness Programme in Schools (TAPS), in 1999. This report included comments from various employers, in the main growth area with regard to jobs i.e. Information Technology, which highlight why the traditional pattern of subject choice should be so worrying. The following are just three of the comments.

Our economy and future wealth...will depend on how well we embrace the new technologies that are emerging in this information age. The study of Chemistry and Physics at leaving certificate level provides the necessary foundation for such technologies. (INTEL, p.6)

They (students) seem to be pursuing traditional subject choices- Girls applying for biology for example -rather than making a choice for another science option that would give them better chances of entry into technology opportunities. (IBM, Ireland, p.9)

In maintaining a supply of well educated young people for the technology sector...the figures for girls studying science subjects and the small percentage seeking Institute of Technology places is also challenging. (IDA, p.8)

As is evident from the above quotes it is essential that women are equipped, through education, to survive and prosper in a labour market that is increasingly dominated by technological and scientific opportunities. It is also worth noting that the down grading of Biology, a valid area of scientific study, as not as worthy as the other sciences is perhaps also a function of the previously mentioned socialisation process, that values male dominated subjects over the "female" subjects. Similar concerns were expressed in the Symposium Report on Gender Equality in The Post-Primary School, at Marino Institute of Education (1994). Dr. Sheelagh Drudy in the keynote address talked about the serious implications of women's lack of exposure to technological, applied and some science subjects as a 'major handicap' in the current labour market. (p. 6)

## Chapter 1

Thus it is safe to say that most educationalists at this time are aware of, and concerned with, the fact that subject choices, and particularly the subject choices made by female students, have long-term negative implications for a large number of students. The question is therefore two fold, why do students make the choices they make? and what can be done about encouraging a different choice?

One cannot discuss this area without looking at subject provision and allocation, and the factors external to the student which influence the subjects they study.

### **Equality of Opportunity and Participation Versus Equality of Outcome**

The majority of students, at primary level, follow the same curriculum but this alters when they enter into second level. There is a potentially wide range of subjects that a student can choose from and there is no formal restrictions on the subjects any student may choose. This is reflective of the formal equality of educational opportunity policy that has been followed by the Irish government, and most European governments, post 1960.

In the context of this policy, education is seen as a basic good and it is believed that, with financial and quasi-legal barriers to education are removed, each student will be free to achieve his or her full potential. This meritocratic model puts the onus on the individual to participate and achieve without looking at the process to see if it accommodates that individual.

Using the equation  $I.Q. + \text{effort} = \text{merit}$  (Young 1961, quoted in Lynch, 1993) the assumption is that those who are able and interested will get on in the system but it fails to question what kind of education is being provided. In both their organisation and curricula, schools are biased towards patriarchal and middle class values. (Lynch, 1993) Those that will succeed in the system are the ones that identify most closely with these values, in other words that have the 'cultural capital' necessary.

It (the curriculum) is classed, gendered and raced in its orientation.

It perpetuates particular cultural traditions at the expense of others, and in so doing reinforces images of what is or is not culturally valuable in a given society

( Lynch, K., 1999, p. 17)

## Chapter 1

It is into this system that at the age of twelve a child enters and expected to make choices, and to cope with those choices, in a supposed meritocracy.

Clarification of the definition of equality in the education system is important if we are to judge the independence of subject choice. If one is to look strictly at attendance rates in both second and third level one could see that from the point of view of participation in education there seems to be equality.

At second level 51.1% of the students are female, at third level this drops to 46.6% but this small gap is decreasing. (Drudy and Lynch, 1993, p.172) If one looks at results attained at Leaving Certificate the same positive picture emerges. In aggregate performance in public examinations girls do better than boys overall. (NCCA, 1992; Lynch, 1991; Lynch and Drudy, 1993)

Where this positive image of equality breaks down is in the analysis of the gender bias in certain subjects. Girls still dominate in subjects such as Home Economics, Music, Biology, Modern languages with 94%, 84%, 67% and 62% to 78% of the students taking these subjects being female. (Drudy, 1994) The opposite gender balance appears in subjects such as Chemistry, Physics, Economics, Technical Drawing etc.

This differentiated curriculum at Senior Cycle puts both boys and girls at a disadvantage in different areas. Boys are under represented in the arts and the subjects with high life skills and social content. Which means they are being provided with an education that is very narrow and work focused. There is less emphasis on aesthetic, moral-religious and socio-personal development in the extra curricular areas also. (Lynch, 1989) While one can legitimately argue that this will put boys at a disadvantage in certain areas of life, from the point of view of jobs and careers they will not suffer, as the subjects they are concentrated in tend to lead to more opportunities and higher earning careers. Females on the other hand are socialised to be responsible in the socio-emotional, private and domestic spheres as well as to achieve in jobs and careers, "... a double burden is placed upon them". (Drudy, 1994)

Thus it is safe to say that access and the removal of formal barriers are not enough to overcome the cultural barriers that exist.

## **Social Class: Impact and Consequences of Social Class on Subject Choice**

Another factor that effects how the student is viewed, by the school, society and by they themselves, is the social class of the student. The link between social class and educational attainment has been long established. In the 1966 report in Ireland "Investment in Education" substantial inequalities in second level participation and access along social class divisions were noted. In 1963 for example 69.1% of boys and 74.8% of girls attended post primary education, however only approximately 54% of the children of group F workers i.e. semi skilled and unskilled manual workers, transferred from primary. (Drudy and Lynch, 1993)

Increase in expenditure in Second Level education followed, with the aim to reduce this imbalance, and in the 80's and 90's there has been a large increase in the numbers of students in post primary sector. By 1990/1991 transfer to post primary was virtually universal, with 99% of 6 to 15 year olds in full time education, and with 70% plus retention rate to leaving certificate (Statistical Report, 1996/1997). There has also been an increase in the transfer rates to third level, from 11% in 1965 to 50%, of the estimated population at age seventeen, in 1995.(Statistical Report, 1996/1997)

This increase in participation has however benefited the children of middle-class families disproportionately and, as discussed earlier with regard to gender, equal opportunities vis-a-vis access and participation does not lead to equality of outcome.

Report after report shows that middle class children are better represented at all levels of the post primary system and at entry to third level education than their working class counterparts. (Drudy, S., Lynch, K., 1993, p.142)

While the large numbers remaining at second level should benefit all social classes, the only reason that many working class children remained in school was due to the high unemployment rates in the 80's and early 90's in Ireland, which restricted opportunities for those lacking qualifications (Department of labour,1991) Children from the least advantaged groups have not gained form staying in school to the same extent.

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Breen in 1986 found a direct link between the parents' socioeconomic group and both Intermediate and Leaving Certificate results with working class pupils not achieving as well as other groupings. This ties in directly with participation rates at third level. In 1965 only 11% of the least advantaged groups made up the student population, this had only risen to 14.8% by 1986. In the 90's such students were still very poorly represented in the professional faculties of third level institutions. (Drudy and Lynch, 1993)

The processes of socialisation, that apply to gender, apply to social class also.

Working Class families have different life chances and life experiences from middle class families which dispose them towards different views of the world around them and of their place in it.

(Drudy, S., Lynch, K., 1993, p.149)

The value orientations of families from a working class background may be different to that of the school the children attend. This discontinuity can lead to the children from such backgrounds choosing the options and subjects that they see of value for a working class future. This self election to future working class culture and occupations, coupled with the fact that in a system that places high value on formal language skills, as a predictor of examination success, when many children do not have the linguistic capital, causes reproduction of inequality. The syllabus in subjects reflects middle class values and achievements, working class language, literature, history or interests are not recognised. Thus an other section of the school population may feel they do not have the cultural capital to succeed in the system.

When discussing this it is very important not to imply that one culture is in anyway superior to another or that there is a deficit in the the culture of others. One should look at the schools and the system that suffer from an inability to adjust to different social situations, and develop the pedagogical expertise to develop the skills of children from a wide range of cultural backgrounds.

## Chapter 1

There are three different types of second level schools, Community and Comprehensive, Vocational and thirdly Secondary, which are generally subdivided into boys and girls schools. In many cases parents have little choice in the type of school that they send their children to, there may be only one type available in an area.

However in larger, urban areas there is a greater choice available and in choosing a type of school parents are also making decisions about the type of education that their child will receive. For example in choosing an all girls secondary school parents are choosing an academic curriculum, generally with a predominance of 'female' subjects, for example Home Economics rather than Technical Drawing. Similarly if a student attends a Vocational School they may experience different ethos, teacher expectations, subjects and courses that can lead to social reproduction. For example, according to the Department of Education statistics 1998/1999, only 16% of Secondary Schools offer the Leaving Certificate Applied to students while 29% and 51% of Vocational and Community and Comprehensive schools respectively do so.

While it is easy to look at the breakdown of students along gender lines, for obvious reasons, it is much harder to gauge the social background of students in the various types of schools. However one study by Breen in 1986 found the following social breakdown, with the aforementioned curricular consequences.

Table 1.1

Breen, 1986		Percentage of	Percentage of
		Students that are	Students that are
		Working Class Male	Working class Female
	Secondary School	29.00%	45.00%
	Vocational School	63.00%	70.00%
	Community and Comprehensive	53.00%	57.00%

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Even within the Secondary school system however some are deemed to be 'Disadvantaged' by the Department of Education and studies have found that there is a significant difference between the achievements of students within disadvantaged and non-disadvantaged schools.

...the difference between non-Transition Year female candidates in designated disadvantaged Secondary schools and non-disadvantaged secondary schools was around 40 CAO points. The findings were similar for all school types...

(NCCA, 1999, p. 216)

Thus we can surmise that student performance continues to be a function of social class, with working class children not achieving as well as they might. Low performance in examinations is also linked in the same report to early school leaving (p.xiii), perpetuating the cycle of disadvantage.

While the numbers of each gender studying the various subjects are available from the Department of Education no such statistics are available for social class. Hannan and Breen, in their 1983 study, found that the proportion of the curriculum given over to Science "related quite highly to the schools median social class" and to examination performance. (Hannan et al., 1983, p.250) In other words middle class students, in middle class schools, achieved better and studied subjects that, long-term, would be of more benefit career-wise.

### **Hidden Curriculum**

Assuming the removal of the formal factors of Provision and Allocation what are the other factors that influence subject choice? Hannan and Breen (1983) proposed three reasons. Firstly, different career expectations, secondly different attitudes to the subjects and thirdly the influence of the school ethos and hidden curriculum.

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Taking the last of these factors first, this section will look at the hidden curriculum in schools. Different schools offer different ranges of subjects and, in general terms, the curriculum offered in boys' schools is narrow and focused; the outcome being that while they have fewer life skills they are being educated for work and employment. Single sex girls schools tend to offer a classical humanities based curriculum, reflecting expectations of society that women will dominate in the clerical, nursing, teaching, semi-professional jobs and service industry; In other words a limited role in the job market and conventional role in the home.

As we have stated earlier there may be no formal policy of excluding a particular gender from any subject but there are means within the school of restricting choice.

The freedom given to schools in curriculum and time-tabling, especially at senior level, has resulted in very noticeable gender differences both in availability and in take-up of particular subjects.

(Drudy, S., Lynch, K., 1993, p.173)

Hannan et al. found that in 1983, for example, 80% of male pupils were obliged to take Intermediate Certificate Science, whereas in girls schools very few were obliged to take science. While most had the option, it was time-tabled against subjects considered as more traditionally 'female', such as Art, Music, Home Economics etc. (Hannan et al., 1983, p.132) This of course has a knock on effect when it comes to who is eligible to take particular subjects at Senior cycle.

Even where the range of subjects is the same, or offered to both sexes the syllabus in most subjects are value laden, the ideas and values of the dominant culture being portrayed as having a higher worth. Womens' achievement in Art, Literature, Science and History are not reflected, neither are the the culture, values, history or achievements of other groups such as non-nationals, travellers or working class families.

Most of the curriculum is patriarchal in both form and substance; the knowledge is also biased in its emphasis and consideration towards white middle class culture.

(Drudy, S., Lynch, K., 1993, p.182)



## Chapter 1

This socialisation continues through the ethos and the extracurricular subjects offered to the pupils. While girls schools have a strong academic climate this does not, or is not allowed to, take away from other aspects of students' development. For example girls schools devote more time to the formal teaching of religion. In the sphere of extracurricular subjects girls' schools prioritise socio-personal development. The emphasis is on caring, developing refinement, self control and pastoral care.

In the sports departments, of girls schools, there are more likely to be hard court and gym facilities rather than field sports which in general are seen as tougher, more competitive and hence more masculine.

In the prospectus or school magazine there is more likely to be emphasis on academic achievement and pictures of girls playing musical instruments or studying quietly. There is also far more emphasis placed on uniform and on neatness in a girl's school, again promoting the idea of conformity. All of these aspects contribute to the ethos of the school and more generally to the socialisation of girls as the future guardians of the moral order. (Drudy and Lynch, 1993)

It is within this atmosphere and climate that young women are asked to choose the subjects they wish to study and such a setting has, as already stated a huge impact on the choices they make.

For the student from a financially disadvantaged background the cost of participation in the extracurricular activities, together with other factors such as the value laden content of the syllabi, could result in alienation from the system. This will effect the students self image, a concept that will be looked at later in this section.

The question, as to what can be done to encourage students to consider different subjects than those traditionally associated with their sex, social class or school, is one for all educationalists. The issues that must be considered here include ensuring that all students have access to all subjects, and coming up with creative and feasible ways for this to be achieved. It should be noted, however, that it is not enough to state this as an aim without taking into account the difficulties faced by small, single-sex, rural schools, or indeed any school, in providing the facilities and the teachers to offer all possible subject options.

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Allocation policies within schools should be looked at to ensure that 'male' and 'female' subjects are not time tabled against each other, with the implicit gender predisposition to certain subjects. Schools should also try and ensure that subjects are made available to all, regardless of ability, as there is a perception that some are more difficult than others and are thus not suitable for certain students.

Smyth in her book *Do Schools Differ*, (1999), suggested the above as being features of effective schools. As well as facilitating as many pupils as possible in taking higher level subjects and having a more open approach to subject choice, schools should ensure that attention is paid to "providing the widest possible choice even to those in "bottom" classes".(Smyth, E., 1999, p.220)

Within the schools another aspect that could be looked at is the role of the Careers' teacher, suggesting non-traditional careers and subjects where a candidate has aptitude. Studies have shown that girls are more likely to respond to career advice on science than boys, and do not link certain science subjects with the careers they have in mind. (Kahle,1985,p.74)

There is a role for the Department of Education and Science, and the various statutory bodies involved in developing the curriculum, in making sure the content reflects the achievements and contributions of all the different sections of society, as we discussed earlier in this chapter, not just the dominant culture. Instituting programmes and policies designed to break the traditional pattern of subject uptake is also an option.

...subjects should be packaged in such a way as to facilitate non-traditional subject choices for girls and boys. (Smyth, E., 1999, p.221)

However if any of this is to succeed then it is the attitudes of the students themselves that will have to change. This brings us back to the first two of the factors mentioned at the start of this section, different career expectations and different attitudes to subjects. These are a function of the academic self image the students have of themselves.

## **Academic Self Image**

This is a concept that will be mentioned, in the course of this study, as one of the factors influencing the students when it comes to subject choice in both Junior and Senior Cycle.

Academic Self Image can be described as the way in which the individual views his/herself as a student, as a member of the education system and as a pupil in the school. A positive academic self image would indicate a person who feels they are well able for the work asked of them in school, capable of succeeding in the educational system, of achieving high marks in examinations and usually has an overall positive approach and attitude to school and schooling.

Academic self image refers to a pupil's evaluation of his/her academic abilities and competence. (Smyth, E., (1999), p.111)

There are certain factors that influence and shape this student self evaluation, including the hidden curriculum and the ethos of the school. These factors are part of the process of socialisation that have been discussed earlier in this chapter.

The result of such life long socialisation differences are clearly reflected in the self evaluation and attitude of girls in the second level schools.

(Hannan et al., (1983), p.xxii)

Other factors that contribute to the academic self image of the student include previous educational experiences, successes or failures at academic endeavours. The pupils attitude to schooling can also be influenced by the type of relationship they have with the teachers. Schools that are deemed to effective are the schools that promote good relations between the staff and students as positive teacher-pupil interaction, or lack there of, is also an developing element.

Parental expectation also has an effect on the expectations the student will hold for his/herself and one positive indicator is the mother's own educational background.

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Social background is also a factor shaping how the students views them self. Children from middle class backgrounds tend to have a more positive view of their own abilities. (Smyth, 1999) One of the most important factors is however the gender of the student. Boys tend to have a far more positive academic self image then girls.

Boys are much more likely to rate themselves as “usually well ahead of classmates” then girls. (Smyth, E., (1999), p.111)

Girls are in general less competitive and have a lower academic self-image then their male contemporaries, even those that are at the same level of academic performance. Compared to boys girls also have a more negative attitude to certain subjects, such as Science and Maths. This self image will therefore play a part in the subjects that they choose to study and the options they feel are suitable for them. In other words it will effect the choices they make which Hannan et al. found was a greater factor then the sex differences in provision or allocation.(Hannan, 1983)

The same study also found that girls were given more choices then boys at second level, they were “less rigidly ascribed to classes” then their male counterpart.(Hannan et al.,p.43) The non-compulsory status of Science in girls single sex schools may not work to the pupils advantage as the female students have been socialised against choosing this subject.

However Smyth (1999) found that in schools that had a more open policy of subject choice there were positive consequences for the student. Thus while subjects should not be allocated and made compulsory for students, at the same time so “as to facilitate non-traditional subject choices” subjects should be designed, packaged and presented in such a way that all students will feel the subject is accessible.

The paradox with regard to academic self image is that while girls have a lower self image they also experience more positive feedback and more supportive relationships with their teachers. They are far more successfully integrated into school life and achieve higher grades overall in the state examinations.

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Thus the main disadvantage to the female student from having a low academic self image is the fact that they may shy away from certain subjects, that they are capable of studying but, are regarded as difficult or challenging. In other words academic self image effects the choices they may make.

There has been no great effort to break the stereotyping with regard to pupil subject choice...Post Primary pupils too are very conservative in their approach to occupational choice. ( Murray, P.,1994, p.15.)

### **Conservative Choices**

There have been considerable efforts made in recent times to overcome the problems of provision and allocation differentiation but the problem of the sexes being under represented in various subjects persists. The term 'free choice' can be used to describe the choices made by students where previous academic record, subject allocation and provision are not a restricting factor.

When there is a 'free' choice in the subjects being offered the above mentioned conservative nature of second level students means there is a gender difference in the uptake.

This was also found by Breen and Hannan in their 1983 study. They found that choice was the most important factor in determining uptake of those subjects that girls are not excluded from, by virtue of the fact they are not available in the school. This they referred to as "true rate of subject choice". (Breen and Hannan, 1983, p.133)

They found that in a gender biased subject, such as Home Economics, the true rate of choice, i.e. those that choose it as a percentage of those that can, is 44.5% for girls and 6.5% for boys. This picture however needs to be further expanded to take into account those excluded due to academic prerequisites, mainly having done the subject at Junior Cycle.

Their conclusion was that although there were differences in the provision and allocation of subjects at Senior Cycle these differences were less important than pupils' own choices and that increasing equality of opportunity and access would only be effective if there was an increase in the number of girls actually choosing a subject.

## Chapter 1

As already stated however changing this pattern of gendered, and indeed classed, choices, with regard to subjects, is not easy due to the process of socialisation that has been influencing the individuals throughout their lives. Students are, by the time they are twelve, making choices that will shape how they are seen by society and how they see themselves, in other words shaping their own self image. They are also making these choices at a very sensitive time in their lives.

Social learning theories suggest that at puberty children are consumed with the concern to define their sex role identity, to establish themselves as masculine or feminine...school subjects symbolise masculine and feminine characteristics, and pupils react to these

(Measor, L., Sikes, J.,1992, p.74)

### **True Choice**

Looking at overall take up rates, as reported in the statistical reports from the Department of Education, is useful in giving an overall picture of the status quo, as regards the levels of subject up-take. These figures will be examined in the next chapter when the National Context of this study will be considered.

The raw data of the numbers choosing the various subjects are a result of all three factors, provision, allocation and choice. Restricting a study to the schools that provided all the subjects in question means the take up rate becomes a product of allocation and choice.

Hannan and Breen in their report for the ESRI in 1983, did just this and they found that the “sex differences in the true rate of subject choice were greater... then were sex differences in subject provision or allocation”. (Hannan et al, 1983, p.254) They then attempted to analyse the pupil characteristics that factored in the choices that these students made with regard to subjects. Among other characteristics they looked at Inter. Certificate performance, educational and job aspirations and attitudes to the subjects. In other words the factors that shape the students academic self image.

## Chapter 1

Looking at the three science subjects they found that the variables influencing take up of Biology were different to those influencing Physics and Chemistry. Biology was considered a less specialised subject, and taken by students with diverse ambitions, while the other science subjects were considered more specialised and taken by those aiming for third level science and applied science courses. In the case of Chemistry the social class of a girl is significant in her choosing that subject, the higher the social class the more likely she will choose it, not so with boys. In Physics those with high scores at Intermediate Certificate and high aspirations, along with an interest in, and a preference for, maths/ science subjects will choose it.

In general the variables that showed consistently across the subjects, and the two sexes, were achievement at Intermediate Certificate and those variables that indexed attitudes towards the subjects and aspirations to third level courses. These are the variables that will be further examined in the course of this study.

The issue of gender as a variable is removed, in this particular study, by virtue of the fact that the school is a single sex school. By the same token the relatively homogeneous middle class background of the pupils and the common curriculum and subject options eliminate these variables. One factor that will be looked at, to estimate its impact, will be the academic self image of the students. To ascertain this their results in the Junior Certificate Examination, the number of subjects studied at higher level, the band they were in at Junior Cycle among other factors will be looked at.

Why certain students have higher aspirations and more positive attitudes and a higher academic self image brings us back to the issue of socialisation, the factors of class and gender, the hidden curriculum and the cultural capital necessary to survive and thrive in a white, middle class, patriarchal system.

## CONTEXT FOR THIS STUDY

### 1: NATIONAL CONTEXT

#### Introduction

In order to consider the findings of this study the context in which it was carried out must be established. This context is the Second level system that exists in the Republic of Ireland at this present time; the profile of the particular school in which the research was conducted will be looked at later in this chapter.

Firstly when considering the Second Level school system one should note that there are three types of second level schools. There are 432 Secondary Schools, 245 Vocational schools, 66 Community Schools and 16 Comprehensive Schools. The large number of Voluntary Secondary Schools are due to the unique history of the Irish Education system where the control by the religious orders on the Educational Establishments was not just tolerated but deemed appropriate by the various governments following independence.

There are two formal public examinations for the purposes of certification at second level, the Junior Certificate, which replaced the Intermediate and the Group Certificate, first examined in 1992, and the Leaving Certificate, a terminal examination after five or six years of study.

What is practically unique in the Irish system compared to other countries is the fact that, despite the different types of schools, the same curriculum applies to all students, in all schools, at Junior cycle level. It was designed to meet the needs of all students, overcoming the traditional division between academic and vocational education and, with the introduction of up to three levels, to meet different ability levels.



## Chapter 2

A three year Senior Cycle was introduced as an option for all second level schools in 1994, bring the number of programmes at Senior Cycle to four.

- Transition Year
- Established Leaving Certificate
- Leaving Certificate Applied
- Leaving Certificate Vocational Programme

The aim of introducing these new programmes was, according to the Department's publication "Senior Cycle Options", to "encourage students to continue in full time education after the compulsory school leaving age by providing a range of programmes suited to their abilities, aptitudes and interests". (p.2)

Not all schools offer Leaving Certificate Applied or the Vocational Programme and, within those schools where it is available, not all students are offered the option. The fact that the Transition Year is also optional also produces two subgroups, those that take two years and those that take three to complete the Senior Cycle. A study by the National Council for Curriculum Development, published December 1999, has shown that there is an over representation of girls and secondary schools in the group choosing to do Transition Year. (p.xiii) They have also shown that those who opted for Transition Year out performed their counterparts, that chose a two year Senior Cycle, scoring 46 CAO points more on average. (p.213)

Another feature of the Senior Cycle is the fact that regardless of school type and whether or not the students opt for Transition Year, female candidates outperform their male counterparts at the Leaving Certificate Examination. For example the difference between non transition year male and female candidates in secondary schools is, on average, 20 CAO points.(p.216)

Table 2.1 shows a breakdown of the grades achieved by male and female students in the Leaving Certificate Examination in 1999.

If one was to split the grades obtained into two equal parts, A1 to C2 and C3 to NG, then in English over 46% of males are in the first category compared to 53.6% of females.



## Chapter 2

The same difference exists in History, with 47.2% and nearly 53% male and female in first group respectively and in Economics the breakdown is 59.3% male and 60.9% female achieving a grade from A1 to C2. Similar results are found in the breakdown of results from ordinary level Leaving Certificate papers and from the Junior Certificate.

The next section shows the gendered pattern in subject uptake at both Junior certificate and Leaving Certificate that is a product, as already discussed of provision, allocation and student choice.

With regard to retention rates at second level, while this steadily increased from the introduction of free education to the nineties, it now seems to have levelled out at 75%, still well short of the governments aim of 90%. Transfer to third level has also steadily increased, with a relatively large jump of 15% in the early nineties, to level out at approximately 50% currently. (Department of Education and Science Statistical Report, 1998/1999)

### **Analysis of the Statistics from the Department of Education for the Academic years 1995/1996, 1996/1997, 1997/1998 and 1998/1999.**

The Statistical Report from the Department of Education while not completely up to date provides a wealth of information on the patterns of subjects being chosen in second level schools. For the purposes of this study it seemed advisable to look at a sample of subjects, rather than them all and see what picture is emerging.

In deciding what subjects to look here two were chosen from the humanities, History and Geography, as almost 100% of all Junior Certificate students study these and are therefore eligible to choose these subjects at Senior cycle.

Also looked at were the numbers studying Science at Junior Cycle, and the follow through to the three Science subjects, Biology Chemistry and Physics at Senior cycle.

Home Economics and Technical Graphics/Drawing were also looked at as these subjects are traditionally, and continue to be, subjects with a distinct sex-bias. Finally the three most common languages taken, French, German and Spanish, and the two most common Business subjects, Accounting and Business Organisation were compared.

## Chapter 2

The focus here is on single sex secondary schools, as this is the type of school where this study was conducted, and therefore the most relevant for comparison sake.

For the same reason analysis was limited to the results of the traditional Junior and Leaving Certificate.

The tables 2.2, 2.3, 2.4 and 2.5 give the percentage of students choosing the various subjects for both the Junior Certificate Examination and Leaving Certificate Examination.

Perhaps the most noticeable feature of these results is their consistency. While four years is a relatively short time there is virtually no change in the percentages taking each subject.

This may be accounted for, at Junior Level, by the fact that most students have a very limited choice in the subjects they can study, once compulsory subjects (as decided by the school) are accounted for. Out of the thirty subjects listed in the Department of Education Reports, as being available at Junior Cycle, the vast majority of students are taking the same eight 'core subjects'. These are Irish, English, Mathematics, History, Geography, French, Science and Civics (or as it is now called CSPE). If the average number of subjects at Junior Level is ten this just leaves a free choice of two subjects. That 'Free choice' can be further restricted by internal allocation and provision procedures within the schools, as already discussed.

At Leaving Certificate there is more freedom to choose as, in the majority of cases, only three subjects are compulsory, Irish, English and Mathematics, with a foreign language recommended. There should therefore be a more even spread among the Business subjects and among the Sciences. This is not however the case.

The same pattern emerges, as has been noted in previous academic studies, of Girls choosing, in large numbers, to do Biology and Home Economics and remaining dominant in the European languages, while their male contemporaries are three times as likely to do physics but, in general, are more evenly spread over the subjects looked at.

TABLE 2.2

## Percentages Choosing Subjects 1995/1996

	TOTAL %	BOYS %	GIRLS%
<b>JUNIOR CERTIFICATE</b>			
HISTORY	99.84%	99.74%	99.82%
GEOGRAPHY	99.84%	99.74%	99.84%
FRENCH	81.25%	75.89%	85.33%
GERMAN	34.97%	33.81%	38.00%
SPANISH	5.02%	6.13%	5.74%
SCIENCE	89.15%	97.53%	80.50%
HOME ECONOMICS	36.45%	0.61%	59.87%
TECH. GRAPHICS	22.60%	40.75%	1.44%
BUSINESS STUDIES	75.91%	76.41%	75.41%
TOTAL NUMBERS OF PUPILS	127628	41129	52971
<b>LEAVING CERTIFICATE</b>			
	TOTAL %	BOYS %	GIRLS %
HISTORY	26.59%	32.82%	22.67%
GEOGRAPHY	46.44%	52.37%	39.71%
FRENCH	64.56%	56.50%	72.46%
GERMAN	21.39%	20.23%	22.60%
SPANISH	3.12%	2.95%	4.02%
PHYSICS	17.88%	29.13%	10.24%
BIOLOGY	53.52%	39.80%	62.57%
CHEMISTRY	16.39%	18.75%	15.21%
HOME ECONOMICS S.S.	35.20%	6.34%	55.33%
TECH. DRAWING	9.26%	16.95%	0.58%
ACCOUNTING	19.05%	22.07%	18.00%
BUSINESS ORGANISATION	39.56%	44.12%	39.18%
TOTAL NUMBERS OF PUPILS	77496	21864	30561

TABLE 2.3

## Percentages Choosing Subjects 1996/1997

	TOTAL %	BOYS %	GIRLS%
<b>JUNIOR CERTIFICATE</b>			
HISTORY	99.87%	99.88%	99.79%
GEOGRAPHY	99.87%	99.88%	99.79%
FRENCH	80.85%	75.73%	84.38%
GERMAN	33.64%	32.10%	36.54%
SPANISH	4.97%	5.62%	5.78%
SCIENCE	89.07%	97.47%	80.26%
HOME ECONOMICS	36.30%	0.57%	59.90%
TECH. GRAPHICS	22.19%	40.33%	1.33%
BUSINESS STUDIES	75.96%	77.21%	75.62%
TOTAL NUMBERS OF PUPILS	122846	40376	51174
<b>LEAVING CERTIFICATE</b>			
	TOTAL %	BOYS %	GIRLS %
HISTORY	26.19%	33.53%	21.04%
GEOGRAPHY	48.94%	54.32%	42.57%
FRENCH	64.80%	57.23%	72.80%
GERMAN	21.00%	20.05%	22.08%
SPANISH	3.43%	2.92%	3.95%
PHYSICS	17.26%	28.19%	9.78%
BIOLOGY	52.36%	39.33%	60.66%
CHEMISTRY	15.26%	17.46%	14.08%
HOME ECONOMICS S.S.	35.61%	5.73%	56.33%
TECH. DRAWING	9.03%	16.43%	0.50%
ACCOUNTING	18.63%	22.67%	17.71%
BUSINESS ORGANISATION	40.63%	44.91%	40.66%
TOTAL NUMBERS OF PUPILS	80342	22544	31933

TABLE 2.4

## Percentages Choosing Subjects 1997/1998

	TOTAL %	BOYS %	GIRLS%
<b>JUNIOR CERTIFICATE</b>			
HISTORY	99.80%	99.86%	99.70%
GEOGRAPHY	99.82%	99.86%	99.73%
FRENCH	80.03%	75.59%	83.63%
GERMAN	33.14%	31.01%	35.59%
SPANISH	5.45%	6.24%	6.37%
SCIENCE	89.12%	97.26%	80.27%
HOME ECONOMICS	36.84%	0.46%	61.00%
TECH. GRAPHICS	22.14%	40.44%	1.32%
BUSINESS STUDIES	76.78%	78.16%	77.22%
TOTAL NUMBERS OF PUPILS	117634	38515	48819
<b>LEAVING CERTIFICATE</b>			
	TOTAL %	BOYS %	GIRLS %
HISTORY	25.51%	32.63%	20.61%
GEOGRAPHY	50.87%	57.47%	43.73%
FRENCH	65.65%	57.71%	73.32%
GERMAN	20.64%	20.70%	21.65%
SPANISH	3.67%	3.21%	4.51%
PHYSICS	16.77%	27.89%	9.21%
BIOLOGY	50.16%	37.66%	58.71%
CHEMISTRY	14.19%	15.45%	13.71%
HOME ECONOMICS S.S.	34.71%	5.27%	55.23%
TECH. DRAWING	8.81%	15.92%	0.39%
ACCOUNTING	18.08%	21.75%	17.45%
BUSINESS ORGANISATION	41.87%	46.58%	41.93%
TOTAL NUMBERS OF PUPILS	80109	22382	31659

**TABLE 2.5**

**Percentages Choosing Subjects 1998/1999**

	TOTAL %	BOYS%	GIRLS%
<b>JUNIOR CERTIFICATE</b>			
HISTORY	99.76%	99.84%	99.58%
GEOGRAPHY	99.77%	99.84%	99.67%
FRENCH	79.99%	75.64%	83.66%
GERMAN	32.67%	31.73%	34.55%
SPANISH	5.10%	5.18%	6.12%
SCIENCE	89.37%	97.99%	80.97%
HOME ECONOMICS	36.90%	0.63%	61.59%
TECH. GRAPHICS	22.09%	40.79%	1.54%
BUSINESS STUDIES	77.09%	79.29%	77.13%
TOTAL NUMBERS OF PUPILS	113876	37033	47246
<b>LEAVING CERTIFICATE</b>			
	TOTAL%	BOYS%	GIRLS%
HISTORY	24.44%	30.70%	20.03%
GEOGRAPHY	53.18%	60.72%	45.58%
FRENCH	66.90%	59.60%	73.62%
GERMAN	19.99%	19.86%	21.45%
SPANISH	0.39%	2.86%	4.33%
PHYSICS	16.20%	27.33%	8.61%
BIOLOGY	47.91%	35.25%	55.97%
CHEMISTRY	13.80%	14.64%	13.84%
HOME ECONOMICS S.S.	33.96%	5.55%	53.26%
TECH. DRAWING	8.78%	17.08%	0.39%
ACCOUNTING	17.05%	19.52%	16.25%
BUSINESS ORGANISATION	43.71%	46.16%	44.47%
TOTAL NUMBERS OF PUPILS	77974	21481	30683



## **Gender and Type of Second Level School Attended**

As we can see from tables 2.6, 2.7, 2.8 and 2.9, applicable for the years 1995 to 1999, there is a consistently higher percentage of girls attending secondary schools than boys. On average 13% more females than males attend secondary schools at Junior Cycle and 11% more at Senior Cycle. The boys that are not attending secondary schools tend to be going to Vocational Schools with on average 10% and 8% more males, at Junior and Senior Levels respectively, in these institutions.

There are several implications of these statistics. Firstly the majority of secondary schools are single sex schools. They are also older, usually, without the facilities to offer certain subjects. As a result of this they tend to offer a more gender biased curriculum. For example in the academic year 1997/1998 out of the 141 single sex boys schools only 5 were offering Home Economics to Junior Cycle students, while only 2 out of 164 girls schools were not. The reverse picture is seen when we look at the other traditionally gender biased subject, Technical Graphics, only 11 girls schools offered this subject compared to 112 secondary boys schools.

No boys in boys' schools took Home Economics but 8.7% in co-educational schools did so, while 90% of all students, regardless of gender studied Science in co-educational schools this was a feature of the curriculum offered rather than co-education itself. (NCCA Report, 1999)

Both types of single sex schools offered History, Geography, languages and Science i.e. a classical humanities based curriculum, but even in this the girls school was more likely to offer all three of the languages and as we already discussed in chapter one, less likely to make subjects like science compulsory.

**WHERE STUDENTS GO TO SCHOOL BY GENDER AND INSTITUTION**

<b>Table 2.6</b>	<b>1995/1996</b>	<b>MALE</b>	<b>FEMALE</b>	<b>TOTAL</b>	<b>% OF ALL FEMALE</b>	<b>% OF ALL MALE</b>	<b>% OF TOTAL</b>
<b>JUNIOR CYCLE</b>		104695	100722	205417			
Secondary		58247	69381	127628	68.88%	55.63%	62.13%
Community and Comprehensive		17070	13289	30359	13.19%	16.30%	14.78%
Vocational		29378	18052	47430	17.92%	28.06%	23.09%
<b>SENIOR CYCLE</b>		70067	74677	144744			
Secondary		42002	52863	94865	70.79%	59.95%	65.54%
Community and Comprehensive		10535	9273	19808	12.42%	15.04%	13.68%
Vocational		17530	12541	30071	16.79%	25.02%	20.78%
<b>Table 2.7</b>	<b>1996/1997</b>	<b>MALE</b>	<b>FEMALE</b>	<b>TOTAL</b>	<b>% OF ALL FEMALE</b>	<b>% OF ALL MALE</b>	<b>% OF TOTAL</b>
<b>JUNIOR CYCLE</b>		101764	97807	199571			
Secondary		56251	66595	122846	68.09%	55.28%	61.56%
Community and Comprehensive		16953	13422	30375	13.72%	16.66%	15.22%
Vocational		28560	17790	46350	18.19%	28.06%	23.22%
<b>SENIOR CYCLE</b>		73340	78567	151907			
Secondary		43442	55018	98460	70.03%	59.23%	64.82%
Community and Comprehensive		11676	10313	21989	13.13%	15.92%	14.48%
Vocational		18222	13236	31458	16.85%	24.85%	20.71%

NUMBER IN FULL TIME EDUCATION BY GENDER AND TYPE OF SECOND LEVEL INSTITUTION

<b>Table 2.8</b>	<b>1997/1998</b>	<b>MALE</b>	<b>FEMALE</b>	<b>TOTAL</b>		<b>PERCENTAGE FEMALE</b>	<b>PERCENTAGE MALE</b>	<b>PERCENT OF TOTAL</b>
JUNIOR CYCLE		98686	94258	192944				
Secondary		54174	63460	117634		67.33%	54.90%	60.97%
Community and comprehensive		16705	13018	29723		13.81%	16.93%	15.40%
Vocational		27807	17780	45587		18.86%	28.18%	23.63%
SENIOR CYCLE		74457	79472	153929				
Secondary		43961	55114	99075		69.35%	59.04%	64.36%
Community and comprehensive		12054	10654	22708		13.41%	16.19%	14.75%
Vocational		18442	13704	32146		17.24%	24.77%	20.88%
<b>Table 2.9</b>	<b>1998/1999</b>	<b>MALE</b>	<b>FEMALE</b>	<b>TOTAL</b>		<b>PERCENTAGE FEMALE</b>	<b>PERCENTAGE MALE</b>	<b>TOTAL</b>
JUNIOR CYCLE		95594	91474	187068				
Secondary		52635	61241	113876		66.95%	55.06%	60.87%
Community and Comprehensive		16097	12749	28846		13.94%	16.84%	15.42%
Vocational		26862	17484	44346		19.11%	28.10%	23.71%
SENIOR CYCLE		72842	78318	151160				
Secondary		42859	53976	96835		68.92%	58.84%	64.06%
Community and Comprehensive		11953	10592	22545		13.52%	16.41%	14.91%
Vocational		18030	13750	31780		17.56%	24.75%	21.02%

### **Social Class and the type of school attended.**

What is not given in the statistical reports from the Department of Education is a breakdown of the social class of the students attending the different types of school, and hence being offered the different types of subjects and curriculum. In the past however there has been a noticeable breakdown of social grouping along the lines of the type of school attended. Schools with the highest transfer rates to third level are Secondary Schools and with the lowest are Vocational Schools.(Drudy and Lynch, 1993) While this may seem to benefit female students, as pointed out above the majority of girls attend secondary schools, the benefit is mainly to middle class students.

### **Conclusion**

Even if one excludes the traditionally gender biased subjects, such as Home Economics and Technical Drawing, there is a definite gender pattern in the subjects that are chosen by students at both Junior and Senior Cycle but this pattern is more pronounced at Leaving Certificate. This is a result of the socialisation factors that were discussed in chapter one.

While there are certain factors common to all girls' schools or all Secondary schools, each school will have features that are unique to that establishment and in the next section the particular features of the school where this study is conducted will be discussed.

## 2: SCHOOL PROFILE

### Background

St. Catherine's College is a large voluntary secondary school for girls founded in 1952 when the religious order were invited, by the parish priest at the time, to open a primary and later a secondary school in a northside suburb.

The primary part of the school was phased out in the sixties however the religious order, who maintain trusteeship of the school, are involved in several other primary schools in the area. Originally a fee-paying private school, St. Catherine's joined the free education scheme in 1967 and in 1989 a board of management was set up. The first lay principal was appointed in 1995. Due to the increase in demand for second level places the school built its first extension in 1964 and a second one in 1977. Throughout the eighties and early nineties the demand for places was very high, outstripping supply but in the last few years the student numbers have started to fall. Despite this lessening of demand the numbers are relatively stable, the current academic enrolment is 840.

Traditionally the school had a very strong work ethic and is very proud of examination results achieved by the pupils of the school. The students themselves were very motivated and they and their parents were anxious that they should perform well in the state examinations. The prospectus states that

“Working to the limit of one’s ability is a particular strength of St. Catherine’s and the evidence of this is laid bare annually in the public exam results”

This emphasis on examinations and the focus of the school on discipline coupled with the strong expectations of students and parents has been the tradition of the school. There has been in recent years a noticeable change in both the ability and behaviour of some of the students which has led to concern in the school that the strong academic emphasis is not meeting the needs of all the pupils. Changes introduced include the fact that a small number of students are now allowed to take foundation level papers, contrary to previous policies, and currently there is a committee looking at the possibility of introducing the Leaving Certificate Applied in the school.

## **The Curriculum**

There is a common curriculum followed by all the students during their the first four years in the school. All students sit the Junior Certificate Examination at the end of third year and usually all participate in Transition Year (in some years there may be one or two exceptions, this will be discussed later). There are two Leaving Certificate programmes offered in the school, the Ordinary Leaving Certificate and the Leaving Certificate Vocational Programme, this is offered to the students that have chosen the right combination of subjects.

### Junior Cycle

The academic subjects at this level are divided into core subjects and optional subjects. Up until 1999 the students at Junior Certificate level studied eleven subjects for examination purposes, eight core subjects and three optional subjects. The high academic standards of the students entering allowed them to cope with this number of subjects in the past. Growing concern about the work load for students, the possibility that Religious Education will become an academic subject in the near future, allied with time tabling concerns caused this to be changed in 1999, when Music and French were moved to the options block. Students now study six core subjects, one language and any other three from the option block to make a total of ten for the Junior Certificate. The core subjects are as follows, Irish, English, Maths, History, Geography, C.S.P.E. The choice of languages include Spanish, German and French, and students must chose at least one of these. The options remaining are Science, Business Studies, Art, Home Economics, Classical Studies, Music and the European Languages.

The non-academic subjects for the Junior Cycle students are Singing, Religion, Games, P.E., S.P.H.E., Drama/Public Speaking. 37 of the 45 class periods in first year are for academic subjects and all students attend the same non-academic classes. The following table 2.10, below, shows the subject uptake in first year, 2001/2002, indicating the relevant popularity of the various subjects.

## Chapter 2

<b>Table 2.10</b>	Preference 1	Preference 2	Preference 3	Preference 4	Preference 5
Business Studies	7.50%	23.00%	17.00%	18.50%	20.00%
French	27.00%	8.00%	8.00%	12.00%	5.50%
German	7.00%	1.00%	2.00%	2.50%	6.50%
Spanish	18.50%	7.00%	4.00%	7.00%	5.00%
Home Economics	7.00%	11.00%	28.00%	16.00%	18.00%
Music	5.00%	9.00%	5.00%	11.00%	17.00%
Science	18.50%	29.00%	23.00%	13.00%	11.00%
Art	10.00%	12.00%	13.00%	20.00%	17.00%

The subject choices for Junior Cycle are made before the student enters the school. When the application has been made to enrol in the school the prospectus is sent out containing the lists of subjects available and stating what is core and what are the options. Parents are then invited to the school for a meeting in March and at this meeting the Careers teachers as well as the Principal and Vice Principal attend to speak about the subject choices and to advise parents should they wish it. Two weeks, approximately, after that the subject choices are returned to the school and the class lists for the following September are drawn up.

The choice of subjects is a free one, there are no restrictions placed on students, according to ability, in the choices available to them. This is in line with Smyth's findings on effective schools (1999), that the widest possible choice of subjects are offered to all students regardless of class or ability level. Parents are advised however that if their daughter is not academically strong that two European languages may be unwise but that is the only reservation expressed.

The classes are banded following an assessment test which is conducted on the same day as the parents' meeting. As stated above however this does not restrict choice, or even the level at which students may take a subject, that is decided in consultation with the parents and students over the next three years.

## Chapter 2

In the academic year, 2000/2001 the school had an open day for the first time, which attracted a good deal of attention, and presumably showed the incoming first years first hand the subjects and the facilities available in the school.

While the facilities for the sciences, Information Technology and practical subjects such as Home Economics, Art and Music are excellent there is however no facility for subjects such as Technical Drawing, Wood or Metal Work, Mechanical drawing. There is also no plans to introduce these subjects. Science is also not a core subject therefore that whole aspect of the curriculum may not be experienced by all students. While there are restrictions on what can be introduced at this stage, due to location and age of the building, the absence of these subjects reflects the hidden curriculum, discussed in the last chapter, that is common to many single sex girls schools.

The White paper on Education claims that it is important that all students receive a foundation in science and technology and that one of these will “form part of the core programme for each student” studying for the Junior Certificate (1995). As with students from many other schools in the same position and with the same tradition, this may not be the case for some of the students in St. Catherine’s.

The fact that Science is not core can also lead to a restriction in the choices that students feel are open to them when it comes to Leaving Certificate subjects. While students may sample a science subject in fourth year and subsequently continue with it in fifth and sixth year they may be reluctant to do so having had no experience of it at Junior Cycle.

The allocation of time at Junior Cycle is weighted in favour of languages and communications; again this is a feature of the ethos and hidden curriculum of many girl’s schools. The minimum amount of time given to this area is 31% for those students studying Irish, English and a European language. This percentage rises to 40% if the student chooses to do two European languages.



## Chapter 2

Given that in order to take two languages a student may opt out of Science or Business Studies there is the danger once again that students may restrict the choices open to them for Leaving Certificate.

It is dilemma facing a number of schools as to what should be the core subjects for students. If a school was to make the above mentioned subjects core i.e. have Irish, English, Maths, History, Geography, C.S.P.E, one European language, and include Science and Business Studies in this list that would eliminate subjects such as Home Economics, Art, Music, Classical Studies, a second European language and, in other schools Mechanical Drawing etc. This dilemma will not be solved here but it is worth noting that the choices made when the student starts in any school have implications for Senior Cycle, and consequently for future careers and opportunities.

### Transition Year

All students are expect to participate in transition year. There have been a few students that have, for various reasons, gone directly into fifth year, but this is the exception rather than the rule. Reasons include having a poor discipline record to that point, being older then the rest of the year or having already repeated a year previously. The programme for transition year is divided into the following sections:

1. General Education
2. Modular Courses
3. Enterprise Afternoon
4. Work Experience
5. Academic Subjects

Classes taken by all students as part of their general education are Religion, Computers, Games, Tourism Awareness, Choir and Log Book (a weekly self evaluation class).

The modular courses are six week units that all the students take on a rotational basis during the year. These are wide ranging and may vary from year to year but generally include Sign Language, Film Appreciation, Consumer Education, Political Education, Japanese Studies.

## Chapter 2

The Enterprise Afternoon is the name given to the choice activity the students get involved in for four classes on a Wednesday. The choices include Social Awareness (working with students from St. Micheal's House), Aromatherapy and Reflexology, Drama, Pottery and Oil painting, First Aid and Technology, and Self Defence. The students choose two from the above list, one for each semester.

Work experience can see students being placed in up to four different locations during two weeks in February and again for two weeks in May.

The last of the five, above mentioned, aspects of Transition Year are the academic subjects and these are chosen by the students in third year. The Transition Year is long established in the school and has been compulsory since the 1980's however the structure of the academic subjects studied changed following a review by the Department of Education inspectors in 1995/1996.

In this review the practice of students' choosing their Leaving Certificate subjects in third year was negatively commented on.

“The Transition Year should offer pupils space to learn, mature and develop in the absence of examination pressure. The school should ensure that, in all areas studied, there is a clear distinction between the Transition Year programme and the corresponding Leaving Certificate syllabus.”

(Department of Education, Transition Year Programmes, Guidelines 1994-1995, p.5)

The recommendation that the students should not make such decisions until the end of Transition Year was taken on board and is now the policy of the school. The effect of this policy will be one of the factors looked at in this study.

There are still decisions to be made however on subjects at the end of third year. The Fourth Years have their exhibition day at the end of the year during which they participate in several academic and skills competitions and also display their work for that year.

## Chapter 2

The parents of Fourth Years and Third Years are invited in to view the exhibition, as are the third year students themselves. At this time the parents of third year students are invited to attend a talk, hosted by the Transition Year coordinator, where the different aspects of the year are explained. The third year students themselves attend a lecture where each department representative will talk to them about the subject and what it entails if they choose it for Leaving Certificate. They are then asked to consider which subjects they wish to try out and submit a list of these subjects in order of preference. They are guaranteed their first four choices at the very least.

For the students in Transition Year Irish, English, Maths and a continental language are compulsory. They then sample six of the following list of optional subjects from which they will then choose their Leaving Certificate subjects at the end of fourth year.

### Optional Subjects:

French	Applied Maths	History
German	Economics	Art
Spanish	Accounting	Music
Biology	Business Organisation	
Physics	Geography	
Chemistry	Home Economics, Social and Scientific	

The range of courses, both academic and non-academic, listed above is only part of the experiences of Transition Year which are extensive and varied and fulfil the aims and objectives on which the programme was based.

As their Transition Year ends the students must make another subject choice, those they wish to continue with for the Leaving Certificate Examination. From the point of view of this study the subjects chosen for Junior Cycle, coupled with the opportunity to sample the subjects in fourth year, must impact on the choices that the students make, with regard to their Leaving Certificate subjects and this will be discussed further at a later date.

## Chapter 2

Towards the end of Transition Year a meeting is held for students and parents to discuss this issue. At this meeting the LCVP programme is also presented and explained by the school coordinator and a speaker from the Department of Education support team. Students that are currently participating in the programme also speak to the audience of their experience of the programme. Also attending this meeting are the careers teachers and subject teachers that answer any queries from the floor about the various subjects and the possible career implications of choosing subjects. The Principal and the Deputy Principal are also in attendance at this meeting.

Following this information meeting the students are asked to submit their choices for Senior Cycle. Four subjects are to be submitted, starting with the European language of their choice and then any three options in order of preference. They are guaranteed their first three (to the best of the school's ability) and either their fourth or fifth choice after that.

In order to take up a science subject at Senior Cycle students are asked to either have studied Science for the Junior Certificate or to have sampled the subject in Transition Year. The option of sampling alleviates, to some degree, the problem posed by the fact that science is not core at Junior Cycle. With the Business subjects students are advised to choose Accounting or Business Organisation only if it has been previously studied but Economics they are free to take up at this stage if they wish. The European Language that they pick must be one they have studied since first year unless there are particular circumstances (such as a parent being a native speaker). In all other subjects no restrictions at all apply to the choices the students make. They are assigned places in Fifth Year classes based on the preferences submitted.

### Senior Cycle

All students take Irish, English, Maths at Senior Cycle and in addition study one Continental Language and three other subjects from a list of twelve subjects. There is a broad range of disciplines represented by these subjects (Linguistic, Scientific, Social and Political, Practical, Aesthetic and Creative, Mathematical). All are taught at mixed ability level and as already stated the students are free to choose the subjects they wish regardless of results achieved in the Junior Certificate or any such criteria.

## Chapter 2

The non academic subjects continue to play an important part in the curriculum with approximately 10 periods a week given to them in fifth year and 7 in sixth year. These non examination subjects include Religion, P.E., Careers class, Typing/Word Processing and Computers.

There is a big emphasis on new technology in Senior Cycle with all students studying Computers. Senior students are time tabled for one period in the typing room, which is fully equipped with networked PCs, where they now study word-processing. For three classes a week, in fourth and fifth year, and one in sixth year, all students are also time tabled for the computer room where other applications, such as Powerpoint, databases and spreadsheets are taught. All the computer rooms also have internet access. Rationalisation of the various aspects of Information Technology was made possible with the introduction of the European Computer Driving Licence course. This is offered to all students and the modular nature of the course allows students to progress at their own pace, while everyone attends the same classes.

The focus on Information Technology, the provision of computers for students since the early eighties, coupled with the excellent science facilities and the availability of subjects such as Applied Maths, all the sciences and all the business subjects are indicative of the academic focus and non-traditional emphasis that is perhaps surprising for a conservative single sex girl's school.

### **Careers Advice**

There are two full time members of staff that make up the Career/Counselling department of St. Catherine's College. As already stated these teachers attend the meeting for the parents of the incoming first years to advise on the subject choices. They are also the people who organise the aptitude tests that all students take in fourth year. The aim of these tests is to provide the students with an objective analysis of their strengths and weaknesses and so aid their decisions about subjects to choose and careers to consider.

## Chapter 2

In sixth year the guidance counsellors interview the students individually to discuss their options with them. Most importantly from the point of view of this study all the Senior students, 4th, 5th and 6th years attend a careers class once a week. The impact that these classes have; their knowledge of future careers and the relevance of subjects for those careers, and the part this plays in influencing subject choice, will be investigated in later chapters.

### **Process for drawing up classes**

The incoming First Years, the Third Years and the Transition Years all list out their preferences for the subjects they wish to study in the respective courses. The task of ensuring that the maximum number of students are facilitated falls to the Deputy Principal of St. Catherine's. The task has been made easier in recent years with new computer packages that are designed for exactly this purpose. The package used by the school is "Facility", which optimises the students choices. As a measure of the success of this package, and the skill of the individual using it, the following are the results for the Fifth Years 2001/2002. 90.5% of the students got their first four choices. 8% got their 1st, 2nd and 3rd choices followed by their 5th, instead of 4th, choice. Only 1.6% of the students could only be facilitated in three out of their five choices. Negotiations with these students then took place and they have now been placed in a fourth class that they deemed satisfactory if not ideal.

### **Students' Achievement at Leaving Certificate Level**

The results the students in St Catherine's achieve in the Leaving Certificate Examination compare favourable with the National Picture. The national average for girls in 2000 was 275 points in the Leaving Certificate. When the results for the Sixth Year ('99/'00) were analysed 66% of the students got over 300 points. The largest number achieved between 400 and 500 points, with 29% of the girls in this bracket, and 16% were in the top bracket of 500 to 600 points. Only a small minority are not succeeding, 4% with less than 100 points and, as has been stated earlier, there is currently a committee looking into providing a Leaving Certificate Applied to facilitate these students.

## **Conclusion**

St. Catherine's College, where this study will take place is a predominantly middle class, all girls, voluntary secondary school. According to Smyth's findings on what makes an effective school (1999) St. Catherine's has many positive aspects. Streaming was removed in favour of banding of classes at Junior Cycle however with the optional subjects, at both Junior and Senior Cycle, the classes are all mixed ability. There are no restrictions placed on any of the students with regard to the subjects they study or the level at which they study them. There is a strong discipline structure in the school and Smyth found that pupils "tend to do better academically in schools which are "strict but fair" ". (Smyth, E., 1999, p.222)

There are also, however, generally positive relations between staff and pupils which are conducive to a good learning environment. In general efforts are made to promote positive academic self image amongst all the students.

There are the elements of the hidden curriculum, identified in chapter one, evident in the school, such as the focus on uniform and the emphasis on the aesthetics such as singing/choir, drama and art. However there is also a huge emphasis on the Sciences, with four fully equipped laboratories and a preparation room, and Information Technology with again four rooms fully equipped with networked PC's and internet, there are also computers in some, soon to be all, of the specialist rooms. The library and careers office have computers for the students use. Students are encouraged to look beyond traditional subjects and indeed careers and the aspirations of the students will be looked at in greater detail in chapter 4.

With gender and class removed as variables, in this study, the aim of the next two chapters is to investigate what, coming from a positive school background, the students in St. Catherine's are choosing to study and why.

## METHODOLOGY

### **What is Research**

True research is an investigation into an area that adds to the pool of knowledge that exists on that subject or in that discipline. If there is not an extension of knowledge, only a compilation or summary of existing knowledge than such work, however extensive, cannot be designated as research. (Evans, 1968) In the case of this study there is very little information available as to why students are choosing certain subjects over others. As has been discussed in the introduction, this is an area I feel is worthy of further investigation to extend our knowledge and to provide a better service to our clients in education, the students.

Genuine research is begun because some one asks a question and has set out to discover the answer. In the course of this journey one should investigate the background to the issue, apply the appropriate research techniques and subsequently appraise and write up the results found. The background has been looked at in the last two chapters and in this chapter the aim is to elaborate on what research methods were considered appropriate and why. Chapter four will then look at the findings and analyse the results. When added to the pool of knowledge this work then may become the basis for further research and investigation. The validity of the results are therefore important and above all the researcher must be honest, however tempting the outcomes must never be moulded to fit a theory, but stand up to independent and objective criticism. Thus when conducting educational research, or indeed any research, it is important to give a brief description of the methodologies involved, and why these were chosen, to ensue that it will be regarded as valid and authentic, and this I will endeavour to do in this chapter.



## **Qualitative and Quantitative Methods of Research**

There are various ways of conducting educational research, from a survey of literature to longitudinal studies of individuals or groups of individuals. (Evans, 1968) Most studies are, however, broken down into two types; quantitative and qualitative, and it is important to distinguish between the two.

Quantitative data can be defined in terms of objective analysis of variables that are measurable, quantifiable, and verifiable and results in propositions that are provable. (Maykut and Morehouse, 1994) Adjectives used to describe such data, by educational researchers, include hard, fixed, explanatory, scientific, value free and universalistic. (Burgess, R., (1985), p. 2)

This kind of research has traditionally been to the fore of educational, scientific and empirical studies. With its measurable indicators and variables it has been regarded as unimpeachable, and the results have influenced educational policies. While there as an undeniable value in such data there is also growing recognition of the limits of such data, and acknowledgment of the value of qualitative research and study.

By its very nature qualitative research is hard to pin down and define, and therein lies its strength, for it acknowledges that any investigation of people must take place within the context of their world, with it's own value system, relationships, philosophies or even it's own language. The qualitative approach to research is concerned with the phenomenology of events and incidents; one focuses on the meaning of events and their implications from the viewpoint of the person being studied.

In Burgess (ibid.) such research is described as interpretative, relativistic, subjective and inductive among other things and there are four characteristics of qualitative research suggested.

1. The researcher works in a natural setting.
2. Studies must be designed and redesigned.
3. Research is concerned with social process and with meaning.
4. Data collection and data analysis occur simultaneously.

These all suggest one cannot view the answers and the actions of a subject without looking at the context in which they occur. The responses of the subject suggest further questions to be examined.

What must be acknowledged is that the world of human endeavor is a complex one of interconnecting relationships where cause is inseparable from effect. To understand the choices that individuals make one must understand the world in which they live and the influences of family, gender, school, friends and wider sociological and economic factors. The context, established in the last chapter, aims to shed light on the factors influencing the individuals in this study. Only when the research conducted reflects this complexity can it have validity.

This does not mean that the two types of research cannot exist together. In many incidents it has been deemed beneficial to use both methods to progress work.

For example, initial fieldwork of a qualitative nature can assist in quantitative research by narrowing and sharpening the focus of a study to specific issues and questions. Following this the data that is needed, from methods such as surveys, is more easily gauged, the qualitative work done can help in designing the survey and help to clarify and validate data gained, providing the background for the interpretation of statistics.

Similarly analysis of statistical data can lead to further questions and patterns emerging which, in turn, can lead to further research of a qualitative nature, such as interviews and observation, to explore these findings and investigate them, allowing the researcher to draw hypothesis that would not be possible from hard facts alone.

Thus the two methods of scientific inquiry, qualitative and quantitative, can complement each other.

...Such an approach suggests that the researcher who has a flexible research design and who utilizes a range of research methods can bring a distinct advantage to a project.

(Burgess, R., (1985), p.4)

The method of research I have chosen is therefore a mixture of both. It is firstly quantitative, that is the use of surveys to investigate the actual subject choices of the students in fourth and fifth year. However coupled with these questions I have included qualitative questions to establish any patterns or common factors that may have influenced the choices of the students and, following from this, interviews with a sample of students to clarify various issues.

### **Collection of Data**

A survey is a planned collection of data that will hopefully, in its analysis, yield patterns and relationships between causative variables and dependant variables. In this case I was looking for a relationship between the class a student was in for the Junior Certificate, the subjects that were studied and the results obtained, and the subsequent choices that the students made for their Leaving Certificate.

There are many different types of surveys, and means of conducting such a survey. These range from telephone interviews, personal interviews, and observation and, of course, questionnaires.

For this research I chose to use two methods of collecting data. The first of these was the use of questionnaires, given to all the population being investigated, from which subgroups could then be isolated and their responses analysed.

There are advantages to using this method as using a questionnaire, a structured set of questions, will result in all participants being asked the same things, or the same facts being elicited from them. This means that there is a greater avoidance of interviewer bias, while of course how it is analysed can still be open to inference.

A second advantage is that the anonymity of a questionnaire can give those responding greater confidence and make them more inclined to honesty with regard to sensitive issues. The fact that questionnaires can be given to individuals to be filled up in their own time and place can also add to the respondents' ease.

Thirdly such information can be easily collected and correlated into tabular form, for the purpose of statistical analysis, allowing for large volumes of data to be dissected and presented in a more digestible form. If a picture paints a thousand words then there can be no doubt that a bar chart is far more eloquent than a paragraph.

Lastly, but by no means of least consideration, is the fact that, for the purposes of data collection, the cost in both time and money of a written questionnaire is much less than that of personal interviews or other means of conducting surveys. Thus this method is particularly suitable to “collect information from a large number of people...(when) limited time and resources” are available (Brown and Dowling, 1998) and was hence chosen by this researcher.

There are however many disadvantages to this method of gaining information. If motivation is to be maintained and to ensure a high and prompt rate of return then it is necessary for the questionnaire to be short. (Evans, 1968) However having a short questionnaire means the quality of the information may be decreased. Misunderstandings cannot be rectified, incomplete answers or unclear answers can be returned and, while this method may be suitable for obtaining facts, or information on behaviors, it is less successful with regard to values, beliefs or attitudes. If a researcher decides that a questionnaire is the most suitable way to gather information then the steps taken to construct the questionnaire can play an important role in determining its effectiveness.

### **Drawing up a Questionnaire**

The first step in drawing up a questionnaire is to decide exactly what its purpose is and therefore what information is needed to accomplish this purpose. While this may sound obvious unless it is clearly thought out the questionnaire may be too long, with the disadvantages, already mentioned, inherent in that. It can result in facts being collected that are more easily gained from other sources, school records for example, and any non-essential information can make subsequent analysis longer and more cumbersome. Looking at questionnaires, which have been used in other research on the topic, can help in the formulation of questions.

While it is practically impossible to devise questions that no one can misunderstand, it is possible to make the questions, and their possible answers, as unambiguous as possible. Questions such as “are you male or female?” deserve the answer “yes”.

To insure that the questions are clear and unambiguous it is advisable to pilot or pre-test a questionnaire. This I did with a small group of students from another school, as well as asking friends and colleagues their opinion and advice.

The order of the questions is also important as easily answered questions and factual information should be requested first followed by a gradual lead into more delicate or sensitive or indeed difficult questions. At no stage should a subject be asked a question that they will feel compromises them or could be used against them.

One of the ways to ensure that this does not happen is to write an introduction explaining the purpose and intention of the researcher, and ensuring confidentiality, asking for co-operation and arousing interest. As I will explain later however this was not necessary due to the method I used to distribute the questionnaire.

The questions should never be leading but this does not preclude supplying a list of possible answers that the respondent can choose from. There should also be space in this case for them to add a different answer if they so wish. This option was considered but for fear of leading, and because I felt that there was little to be gained with regard to time in pre-listing possible responses, I decided against this option in the initial questionnaires.

The layout of the questionnaire should also be considered. If one wishes the respondent to tick a particular box it is important to make the line up the question clearly with the corresponding box. Similarly if longer answers are required there should be enough space given on the paper for the individual to fill in their reply while trying to avoid questions that lead to essay style answers. Form and layout should be styled as to make answering and filling in, and subsequent analysis easy as possible. To this end I used a grid, of lines and columns, to make sure the subjects and the levels and the reasons why they were chosen were all on the same line. An effort was made to give adequate space for longer answers, if required, and almost all respondents adhered to the space given.

The final drafts of the questionnaires (Appendix 1 and 2) were drawn up at last and were ready to be administered to the sample population.

Overall the questionnaire used was short and easy to administer, this was due to the fact facts such as the results obtained in the Junior Certificate, classes the students were in and other such factual information was already available to me.

### **Population for Survey**

While the subjects that are chosen at Junior Certificate level have an impact on the subjects that students choose at Senior Cycle they themselves have very little input into these initial choices, the parents having a greater say at this stage. The factors that may have had an influence in Primary School were also outside the scope of this study. Therefore the population I surveyed were the students that would be in Transition Year and Fifth Year during the period of the research, 2000-2001. At the end of Third Year the students choose a range of subjects they would like to sample in Transition Year, the Fourth Years simultaneously choose the subjects they are going to study for the Leaving Certificate, as explained in detail in the school profile.

### **Carrying out the Survey**

Following the pilot run with the questionnaire, and after making adjustments as required, the next issue was to distribute the two questionnaires to the Fourth and Third Years in the school. As it was close to the end of the school year the following mechanism was suggested to me by the principal: that the questionnaire could be distributed while the students were sitting the end of term exams and collected on the same day. With the co-operation of the teachers that were supervising the exams I was able to distribute the questionnaire and explain the purpose of it, i.e. that it was for academic research, not for the school. I could then assure students that all answers would be treated in confidence, no individuals would be named and deal with any queries that arose.

This method worked well as it allowed me access to the entire year at once, eliminated the need for a covering letter of explanation, allowed me time to deal with the few questions that arose. It also ensured that, with the exception of those who were absent for the examination and the spoilt returns, there was a high degree of completion. At this point I would like to thank the Principal, Deputy Principal and Teachers for their co-operation in this matter.

### **Tabulating the Data from the Survey**

The results from the surveys could then be entered into a database which made examining the responses of different subgroups, such as the students that chose Physics and so on, easier to extract from the entire population. Results could then be further examined and the statistics and graphics in the chapter on “Finding and Analysis” are produced as result of these surveys.

### **Second Set of Surveys**

Following the interviews, which will be discussed later in this chapter, I chose to do a second set of surveys with Fourth Years, students who had previously been surveyed in third year. These questionnaires (Appendix III) were nearly identical to the ones that had been given to the previous group of Fourth Years, those in Transition Year 1999/2000. The extra questions had developed from issues that the interviews had thrown up. The same strategy of using the fourth year exam to distribute and collect the questionnaires was used but for various reasons the population for this second questionnaire was smaller than hoped but still nearly 70% of the total of Transition year students and therefore adequately representative. The means used to handle this volume of data was the same, databases and spreadsheets, as with the previous questionnaires.

## Interviews

The advantages of the use of interviews as a means of collecting data mirror the disadvantages of using questionnaires as discussed above. Interviews allow the researcher to explore complex issues, gather information that is not possible to get from short answers, to probe and prompt and get clarification and examine values and beliefs.

Similarly the disadvantages also echo the advantages of surveys. They can be time consuming, not suitable for dealing with a large population, and in restricting sample size there is the issue, that I will look at shortly, of making sure that the sample is representative. Open ended questions and discussions are also difficult to analyse and such direct interactions are open to interviewer, and interviewee, bias and subject to nuances in relationships that are avoided by the distance a questionnaire provides. There are steps that can be taken to avoid these problems and to conduct interviews in manner that makes the data gathered valid.

There are two types of interview, structured and unstructured. The most extremely 'structured' interview is like a personally administered questionnaire. A predetermined list of questions is given in the same order to each interviewee and thus gives consistency across the sample. It has the advantage however of allowing the researcher to achieve clarification of answers, clear up any misunderstandings or misinterpretations, and provides a context for answers that would not be possible to get otherwise. An unstructured interview is more like a conversation, with the interviewer working, with a very loose set of guidelines, to gain more information about the perspectives and understandings of the interviewee. All interviews involve using prompts and probes to gather information from the subject.

“A probe is a question used in an interview to gain further information, clarification, or which seeks to access underlying causes or reasons for a particular response. A prompt involves suggesting possible responses.”

(Brown and Dowling, 1998, p. 62)



The type of interview the researcher chooses to conduct will determine the prompts and the probes they use. In the course of this research I chose to aim for middle ground, with a pre-determined set of questions (Appendix IV), but allowing for more open interaction if the information being given should prove rewarding.

### **Steps involved in conducting the Interviews**

The first issue that the researcher must look at is access. In a school setting one must gain permission from the Principal and the parents of the students, if they are underage, and of course have the co-operation of the students themselves. There is also the issue of time, when is it feasible to interview the individuals, making sure they are not losing out on class time in their academic subjects and that their teachers agree to releasing them. The location where the interview is to take place should be considered. Offices, while they may offer privacy, are also associated with the authority of the school and are therefore not conducive to open and honest answering on more sensitive questions.

The same difficulty applies in how the subject sees the researcher, “exactly who the interviewee thinks they are talking to, and why, will affect what they say” (Brown and Dowling, 1998).

The relationships that preexist between teacher and pupil, or between principal and teacher, indeed even between two teachers, may militate against frank discussions.

This is one of the intrinsic difficulties with qualitative research as the researcher is not outside of the process but an element of the process, and that factor cannot be set aside any more than his or her perceptions and pre-conceptions can be. The researcher must address this difficulty.

The management of the interview is the next issue to be addressed. The initial stage should be relatively informal, putting the subject at ease, explaining the process and addressing any concerns, “...the quality of the data is dependent on the quality of the relationship you build with the people being interviewed”. (Measor, in Burgess, 1985)

The initial questions should be easy to answer, questions that are of a personal, sensitive nature or awkward for the individual should be left until later in the interview. The same general rule that applies to questionnaires, “move from the particular to the general” also applies here. (Brown and Dowling, 1998)

Managing a structured, or semi-structured, interview should take account of how one question can lead to the next, as answering difficult questions with no prior thought is disconcerting and the quality of the answers is effected. There should also be time at the end to close the interview, thank the interviewee and deal with any issues and concerns that have arisen.

### **Population for Interview**

The process of interviewing individuals is a time consuming one and while, as has already been stated, is advantageous for discerning attitude and beliefs it is not feasible with a large population. Therefore it is necessary to sample, to select elements of the population, for interview and hopefully from this process to get a feel for the views, attitude or beliefs of the general population. If generalizations are to be made based on the smaller sample, then it is clear that what is “more important than the size of the group tested is its representativeness” (Evans, 1968). There are many ways to get a sample population that is deemed representative of the whole, these include quota sampling, random sampling, cluster sampling etc.

Simple random sampling, in this case, was not a viable option as there are more students in the academically better classes, up to thirty as opposed to fifteen in other classes, and therefore one of these students is more likely to be picked for interview. There is also the possibility that those chosen would have elected not to study the subjects I was focussing on and hence an interview with these students would yield no new information. Thus a stratified random sample, choosing a percentage of each Junior Certificate Class, or a cluster sample, a percentage of those in the various Leaving Certificate subjects, seemed more appropriate. In the end three pupils from each of the following Leaving Certificate subjects were selected at random by the computer; Physics, Biology, History and Home Economics.

## **The Interviews**

All the Fourth Years were in school for the Transition Year open day, mentioned in the school profile, when they display their work and achievements from the Transition Year for parents and friends. During this day there are no classes and therefore the Fourth Years are free to take part in the interviews. All the twelve, bar one, had no difficulty taking part and that one chose her own replacement, which was as random as the original choice. The interviews were taped and later transcribed. The tape initially put some students off but they very quickly settled into the interview and were, by and large, forthcoming with their responses. There was a list of questions that were drawn up in advance to give a semi-structure to the interview but, if an interesting issue arose, the freedom to pursue that issue. The initial few minutes were used to put the interviewee at ease and then the tape was turned on and the interview proper commenced. The interviews turned up some interesting points that will be discussed in later chapters and in total the transcription was approximately 8000 words.

The location was a small office that afforded privacy and intimacy but at the change of class, for the rest of the school, the noise on the corridor outside was disruptive but unavoidable.

## **Conclusion**

Both the questionnaires and the interviews highlighted issues that will be looked at in detail in the next chapter. One critical aspect could be that the study might have benefited to a greater degree from more qualitative data, more interviews, then were conducted. Overall however they were successful in gathering the data need to look at the issue in question.

## **Chapter 4**

### **Findings and Analysis**

#### **Introduction**

This chapter gives the findings from the questionnaires and the interviews discussed in chapter three. These findings will then be analysed in order to attempt to shed light on the issue of subject choice in Senior Cycle in Secondary Schools.

The chapter will be broken up into three main sections. The first deals with the quantitative data on the make up of the Senior Cycle classes. Factors that will be looked at include the subjects the students chose for the Junior Cycle and the grades the students attained in the Junior Certificate examination. Other factors that are looked at, as possible influences, are the Junior Cycle band the students were in and the number of subjects sat at higher level by the students for the Junior Certificate examination. By looking at these particular features, and academic background, of the students that have opted for the different subjects at Senior Cycle it is hoped that patterns might emerge, illustrating what 'type' of student is choosing the various subjects. The factors that, the students themselves feel, are an influence on them will also be looked at here.

The second section will look at the effect of Transition Year on the subjects chosen. The option to sample the subjects during this year could allow students the opportunity to study the subjects that they might otherwise have been excluded from due to their choices at Junior Cycle. The issues looked at will include the numbers availing of this chance, the subjects they are studying for the first time and the numbers continuing with these new subjects. Another issue looked at, with regard to Transition Year, is the subject preferences expressed by the students before and after the year. To investigate if sampling the various subjects is positively or negatively effecting the number opting to study them at Senior Cycle.

The third and final section will look at more qualitative data emerging, looking at and analysing the aims and ambitions of the students choosing the various subjects. The aim is to see are there any common features, among the students of particular subjects, with regard to their career aspirations, their reasons and motivations behind the choices they made and their attitudes with regard to school and education.

Two different years were looked at during the course of this study. The first are those who sat the Junior Certificate examination in June 2000, took part in Transition Year from 2000/2001 and will be sitting the Leaving Certificate Examination in 2003. This group I will be calling Cohort 1 as they have been surveyed twice and it is from this group the interviewees were chosen. The second group are those that sat the Junior Certificate in 1999. This group was only surveyed once and is referred to in this chapter as Cohort 2.

In this chapter I will also be focussing on four particular subjects. The first two subjects, Physics and History could be regarded as high profile subjects, or as high status subjects. By this I mean subjects that is chosen by few students, generally seen by students and indeed the public at large as a difficult subject, traditionally seen as a male dominated subject (Physics) and one that, if chosen would indicate the student is academically able and capable. On the other hand is a 'low status' subject that, while seen as enjoyable and interesting, is not necessarily viewed as difficult or challenging and not one that points to 'high profile' ambitions or careers in the long term. The second two subjects focussed on are Biology and Home Economics.

By looking at the students, their academic background and their future aims, albeit with an admittedly small sample of both students and subjects, I hope to shed some light on the question of "Who, what and why?"

## Section 1

### Subject Preferences for Cohort 1 and 2

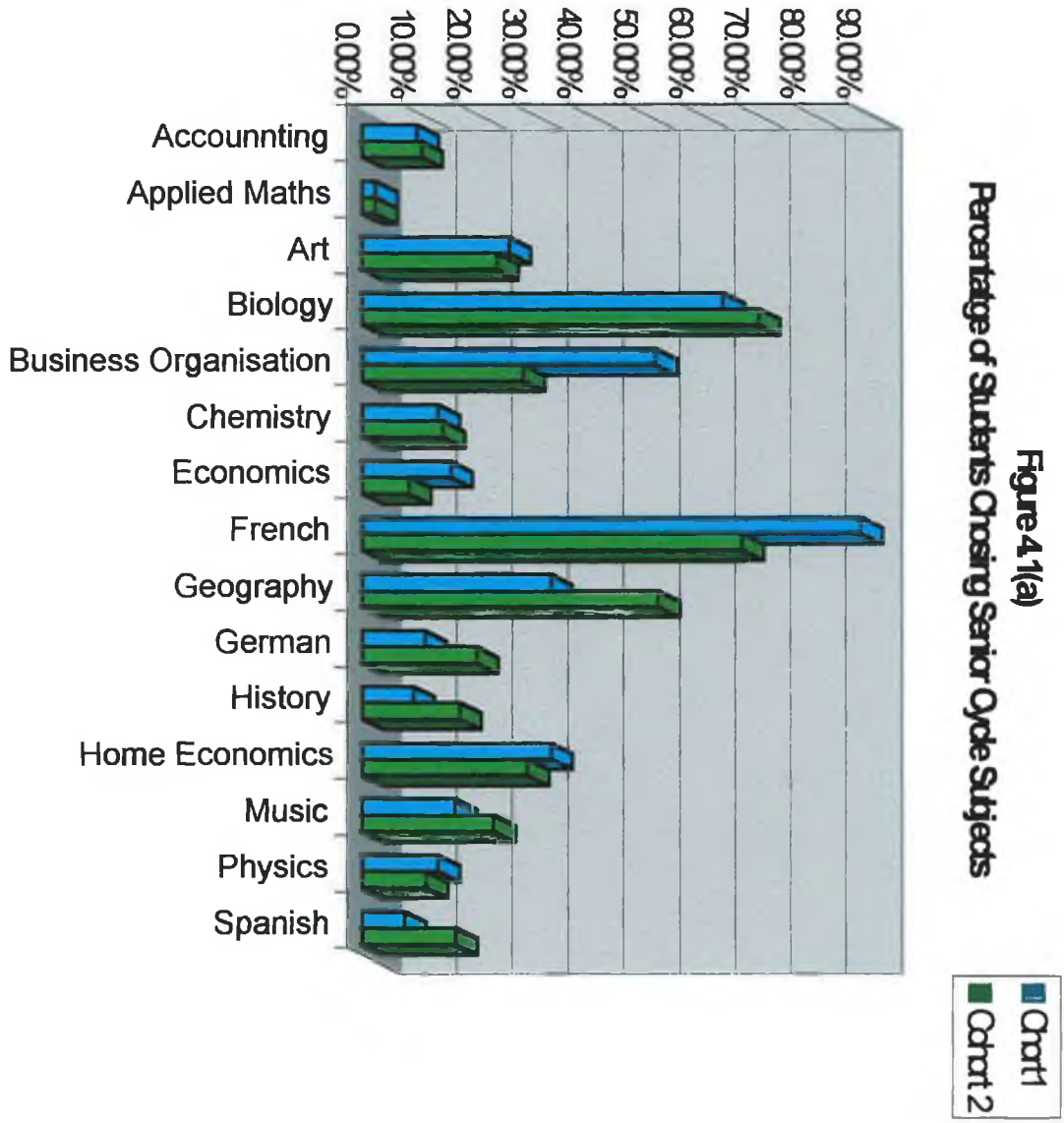
The first bar-chart of this Chapter (Figure 4.1 (a)) shows the actual percentages from the two years looked at that have chosen to study the various subjects at Senior Cycle. As has already been discussed in chapter 3 this follows Transition Year, when the opportunity to sample the various subjects has been offered to the students, to aid them in making an informed choice. When picking the subjects they wish to study there is also little, or no, restriction as to who can choose what. This chart should therefore reflect the actual preferences of the students; nothing is however as clear cut as that, as will be discussed below.

In both of these years classes in all the subjects that were offered were timetabled, with the exception of Applied Maths in both years. The small numbers opting for this subject made it unfeasible and the students that picked it as one of their first four choices were accommodated with their fifth choice.

Looking at the graph in question it is obvious that the most popular science, indeed the most popular subject after French, is Biology. The other two sciences, Chemistry and Physics are chosen by only ten to fifteen percent of the students. Of the Business and Commerce subjects the most popular subject is Business Organisation. This is the third most popular subject for Cohort 1, while Geography occupies this position, with Business Organisation in fourth, for Cohort 2. Interestingly the main difference between the two years is the 20%+ gap between these two subjects, inversely placed in 3<sup>rd</sup> and 4<sup>th</sup> in the two years.

Cohort 2 show a greater interest, as a year, in the languages, with almost twice the numbers taking the minority languages while cohort 1 remain with French. The other two European Languages do not however challenge French as the popular choice and, with only slight variations in their percentages, the remaining subjects also continue to be less popular options.

**Figure 4.1(a)**  
**Percentage of Students Choosing Senior Cycle Subjects**



What is also interesting is the order of preference in which the subjects were listed. At the end of Transition Year the students are asked to list the subjects they wished to study, starting with a language and then any other four in order of preference. Every effort is made to get them the first four but if not the fourth then the fifth will be offered. Thanks to the efforts of the Deputy Principal and a new computer package the vast majority of students are catered for. Since the first subject, on the list of preferences, must be a language the subjects of interest to this study are the four choices after the language.

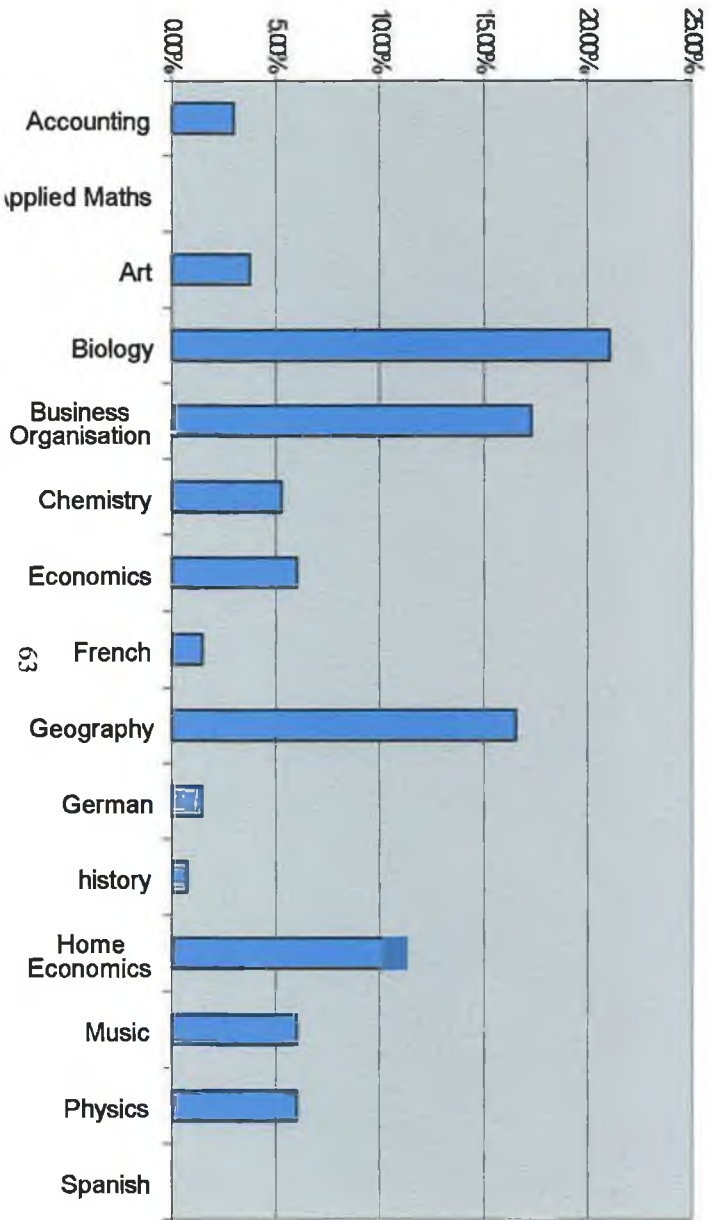
Figures 4.1 (b), (c), (d) and (e) represent these preferences. Biology is high on the list for students in cohort 1, with nearly 35% of the year placing it as their first choice Leaving Certificate subject. The spread of subjects in second place is wider but again led by Biology with over 20%. Considering that the subjects the students are the surest about choosing come first then well over half of the year are positive about this subject. Very few are adamant about the other options, for example less than 5% of the students are sure they wish to study Accounting, Economics, Geography, History and Physics. With regard to Geography it is interesting that, when so few place it as their prime choice, nearly one fifth place it as their fifth preference, in other words it is a subject they are not adverse to but also not adamant about continuing.

The most popular choices overall, after one European language, are Biology, Business Organisation, Geography and Home Economics.

From the point of view of this study, while duly noting the relative size and popularity of the classes and subjects, further analysis of the composition of the classes is necessary to clarify why some subjects remain popular while others are firmly fixed as elite and/or minority subjects.



Figure 4 (c), Second References



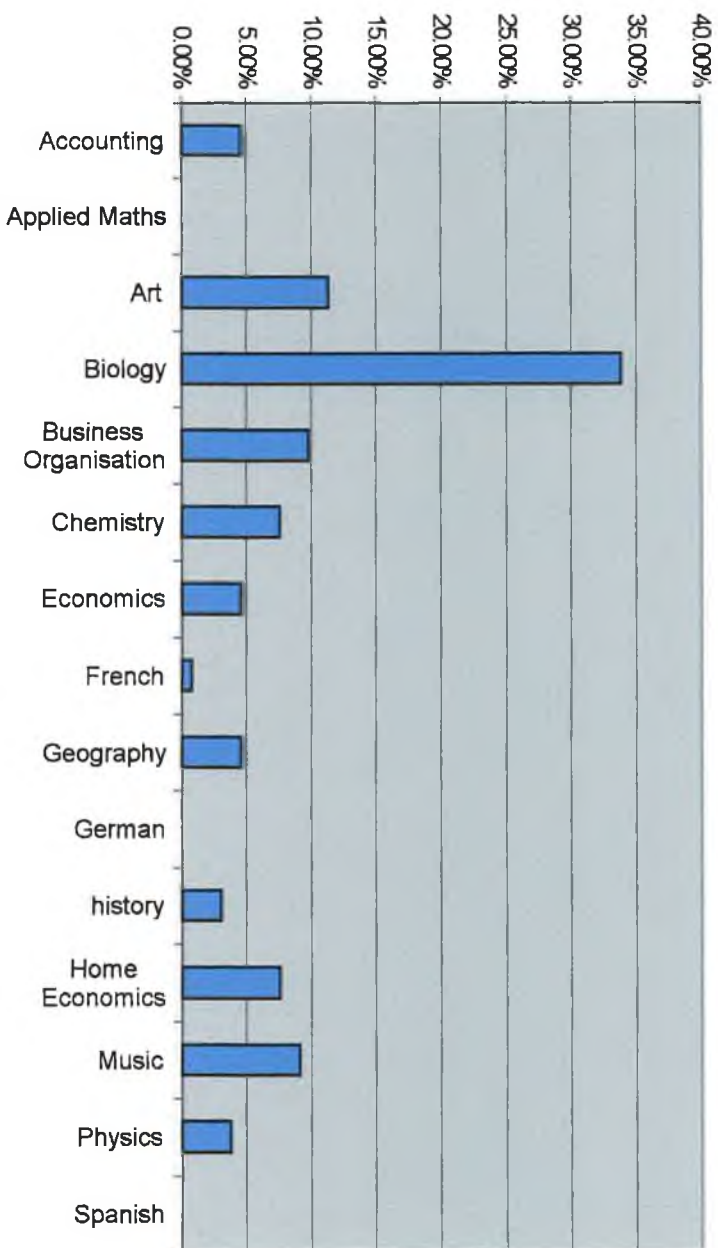
**Figure 4.1(b) First Preference, after Language, Cohort 1**

Figure 4.1 (d), Third Preference

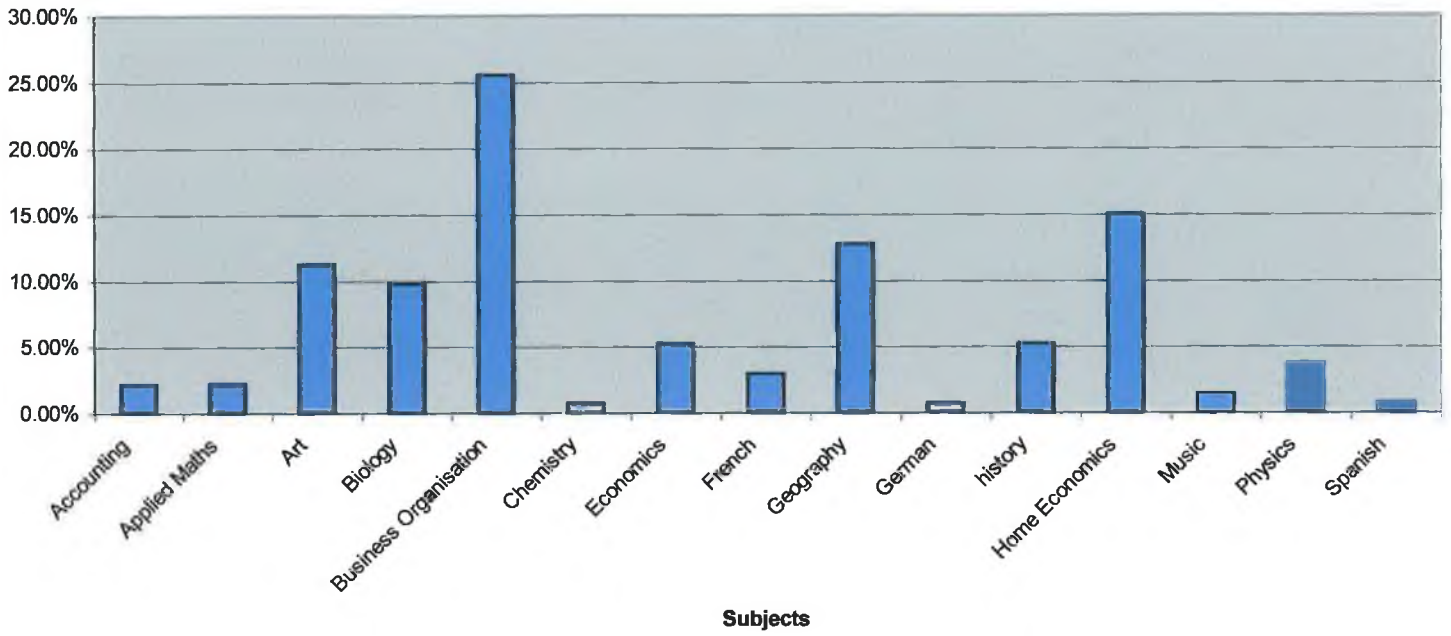
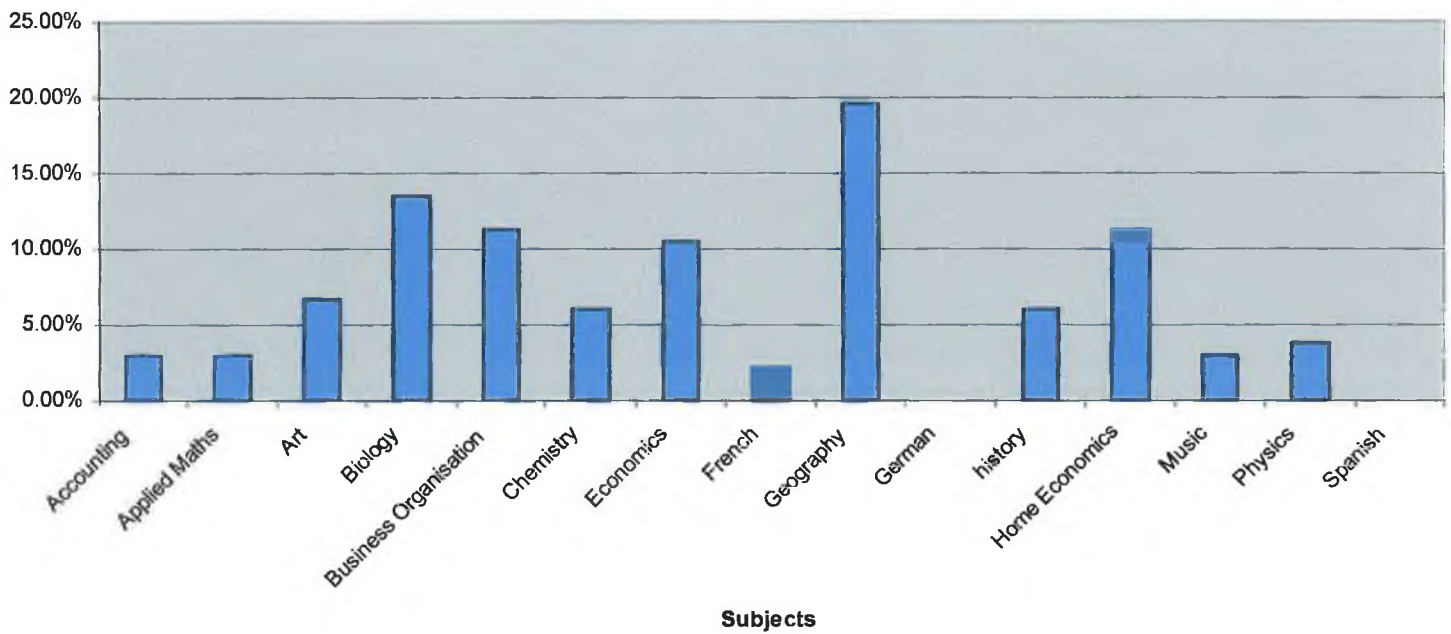


Figure 4.1 (e), Fourth Preference



## **Subjects Chosen for Comparison**

As discussed earlier I have chosen four subjects for comparison and these are Physics, Biology, History and Home Economics. The reason for choosing these subjects is the relative popularity, nationally and within the school, of these subjects. Biology is the most popular of the Sciences and Physics the least: however both are declining in popularity.

History, the third of the subjects focussed on in this study, is also declining in popularity. It is regarded, according to the questionnaires of this study, to be a difficult subject. The opposite is true of Home Economics, again according to this study's findings, a subject considered relatively easy and not declining in popularity with female students.

The following are some of the comments, taken from the interviews, which demonstrate how Physics and History are perceived.

L.D. is one of the students that sampled History and then decided not to continue with the subject, "I really loved History to third year and going into fourth year I tried it and it was just so hard... so difficult...". Even those students that decided to keep the subject on for fifth and sixth year felt that this was not an easy choice.

One such student was P.M. who told the interviewer that "I wasn't going to pick it because everyone says it is really long and hard to learn... ". When asked if friends were in the class she replied "No, most people were saying 'no don't do it, it's too long' and so on". Similar responses were given by those who had chosen Physics for fifth and sixth year, "I was advised not to do it by friends, 'it is the hardest science', but I liked it so..." (K.B.). Both Home Economics and Biology were mentioned by students as being easier than the other choices they were considering and easier for getting points.

The following table shows the percentage, nationally, of female students taking these subjects, for the years 1995 to 1999 (the most up-to-date figures available).

Table 4.1

*Percentage of Girls Taking the Subject in Senior Cycle*

	1995/1996	1996/1997	1997/1998	1998/1999
Physics	10.24 %	9.78 %	9.21 %	8.61 %
Biology	62.57 %	60.66 %	58.71 %	55.95 %
History	22.67 %	21.04 %	20.61 %	20.03 %
Home Economics	55.33 %	56.33 %	55.23 %	53.26 %

(Department of Education and Science, *Statistical Report*, 2000,1999,1998 and 1997)

Table 4.2

*Percentage of Students in St. Catherine's taking the Subjects at Senior Cycle*

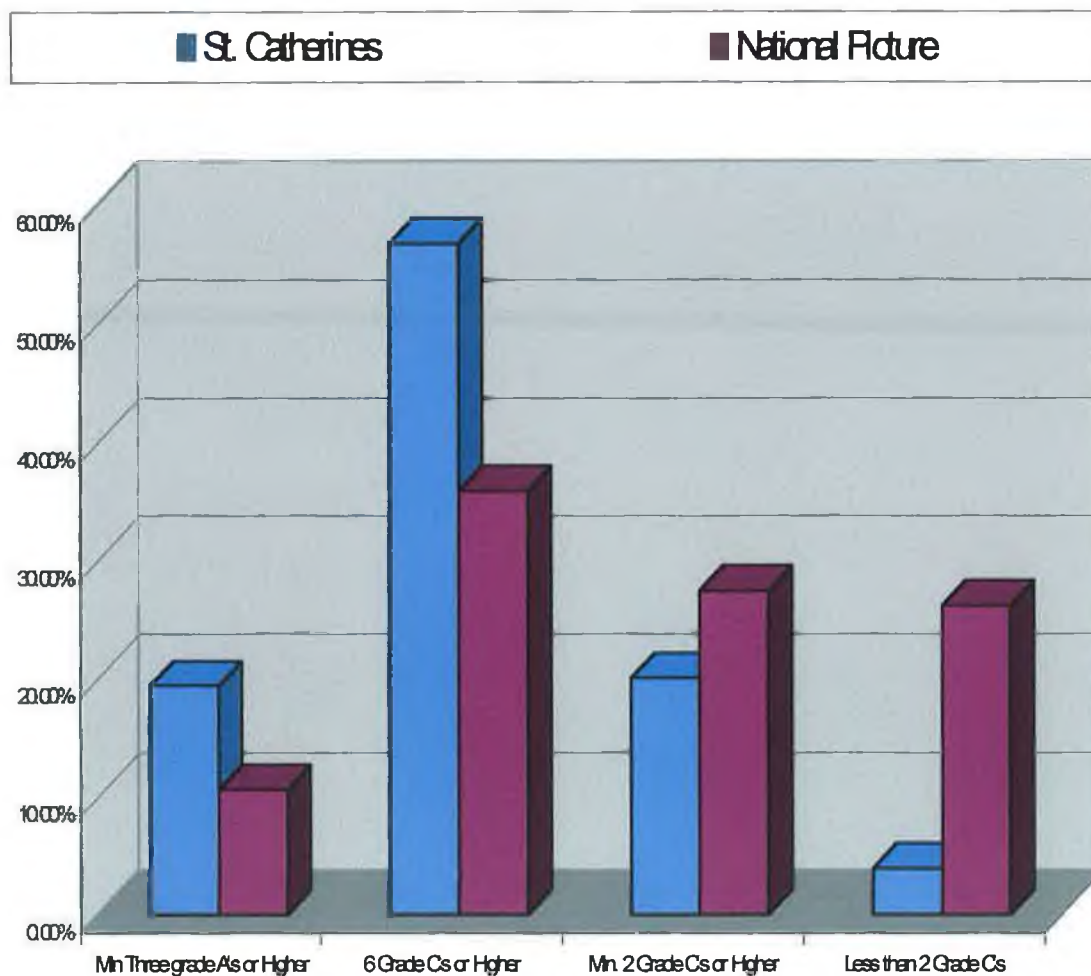
	Cohort 1	Cohort 2	National Figures For Comparison...	1998/1999
Physics	14%	12%		8.61 %
Biology	65%	71%		55.95 %
History	10%	17.5%		20.03 %
Home Economics	34%	30%		53.26 %

As can be seen from the comparison with the academic year 1998/1999 the percentages taking Physics and Biology compare favourably with the national picture and the numbers for History and Home Economics, subjects normally associated with classical secondary and female education, are lower than might be expected. This reflects the emphasis that is placed on science education within the school, as discussed in the school profile.

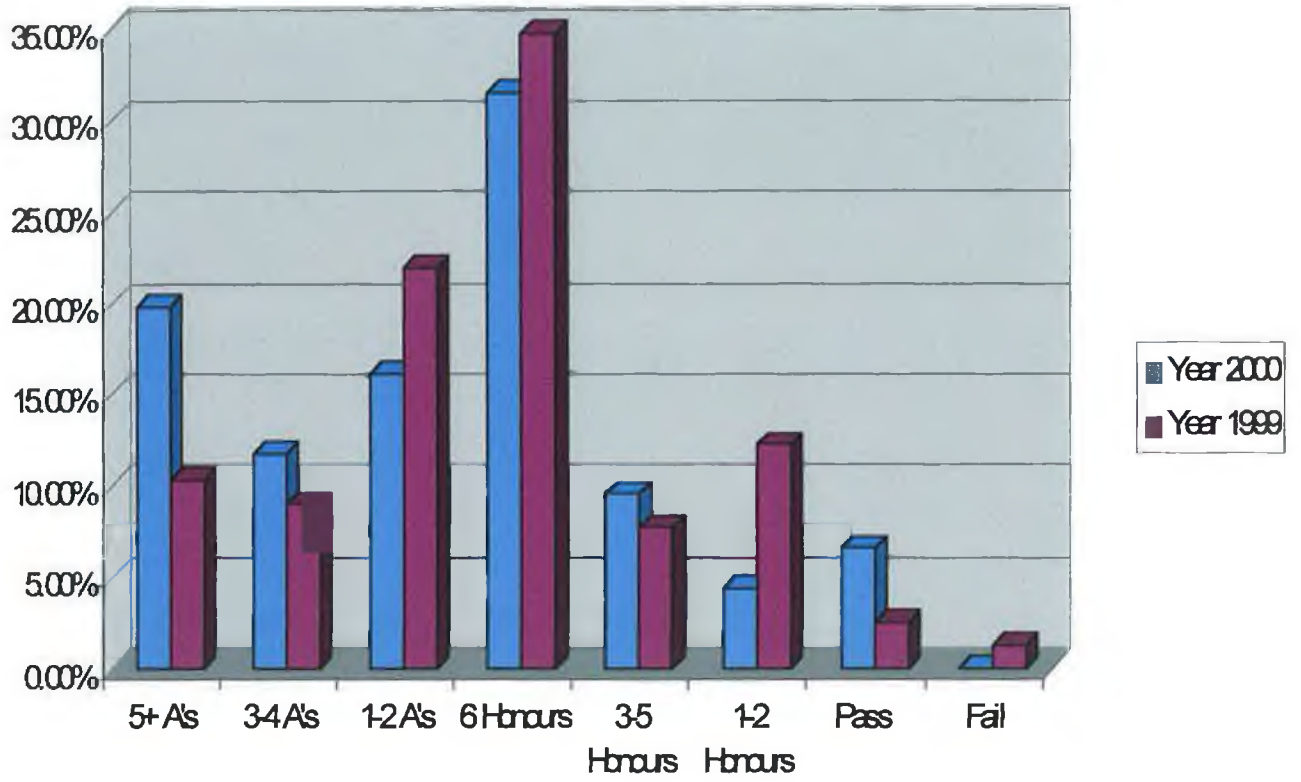
## Junior Certificate Performance and the Subjects Chosen

As already discussed in the school profile St. Catherine's College has traditionally a strong work ethic and prides itself on the examination results. Figure 4.2(a) shows the results from the Junior Certificate in St. Catherine's in 1999, which compare favourably with the National results of the same year. Figure 4.1(b) Compares the results obtained by the students in St. Catherine's for the years 1999 and 2000.

**Figure 4.2(a) Grades Achieved in Junior Certificate 1999**



**Figure 4.2(b)**  
**Overall Junior Certificate Results For 1999 and 2000**



The results from Cohort 1 (Junior Certificate 2000) prove better than the previous year, with nearly one fifth of the students achieving five or more A-grades on higher level papers. In both years the majority feature in the middle bracket of six honours on higher papers and grades achieved follows an approximately normal curve.

This should be taken into account when looking at the other results that follow. Considering that over 75% of students achieve 6 Honours or above, their presence in certain subjects does not necessarily indicate that that subject is regarded as 'high profile' by the students but must be compared with the percentages in other subjects.

Figure 4.3(a) and 4.3(b) show the above mentioned four subjects, and the grades obtained in the Junior Certificate by the students who chose those subjects for the Leaving Certificate, i.e. for Fifth and Sixth Year, in St Catherine's.

When one looks at the Junior Certificate results (Fig. 4.2(b)), one can see that the majority of students are in the middle bracket, as would be expected, and therefore, if all feel free to choose any subject, there should be a similar distribution of grades in each class. This is not the case however, especially for those students in Cohort 1.

While there are changes between the two years, as can be seen from the graphs, it is noticeable that the academically weaker students are not represented in either Physics or History classes, no student who only passed or got one to two honours are in either class, either year. From Cohort 1 well over half the class are students that got five A's or more. Thus for this year, in particular, there is obviously an image issue for History. This will be discussed in greater detail later in this chapter.

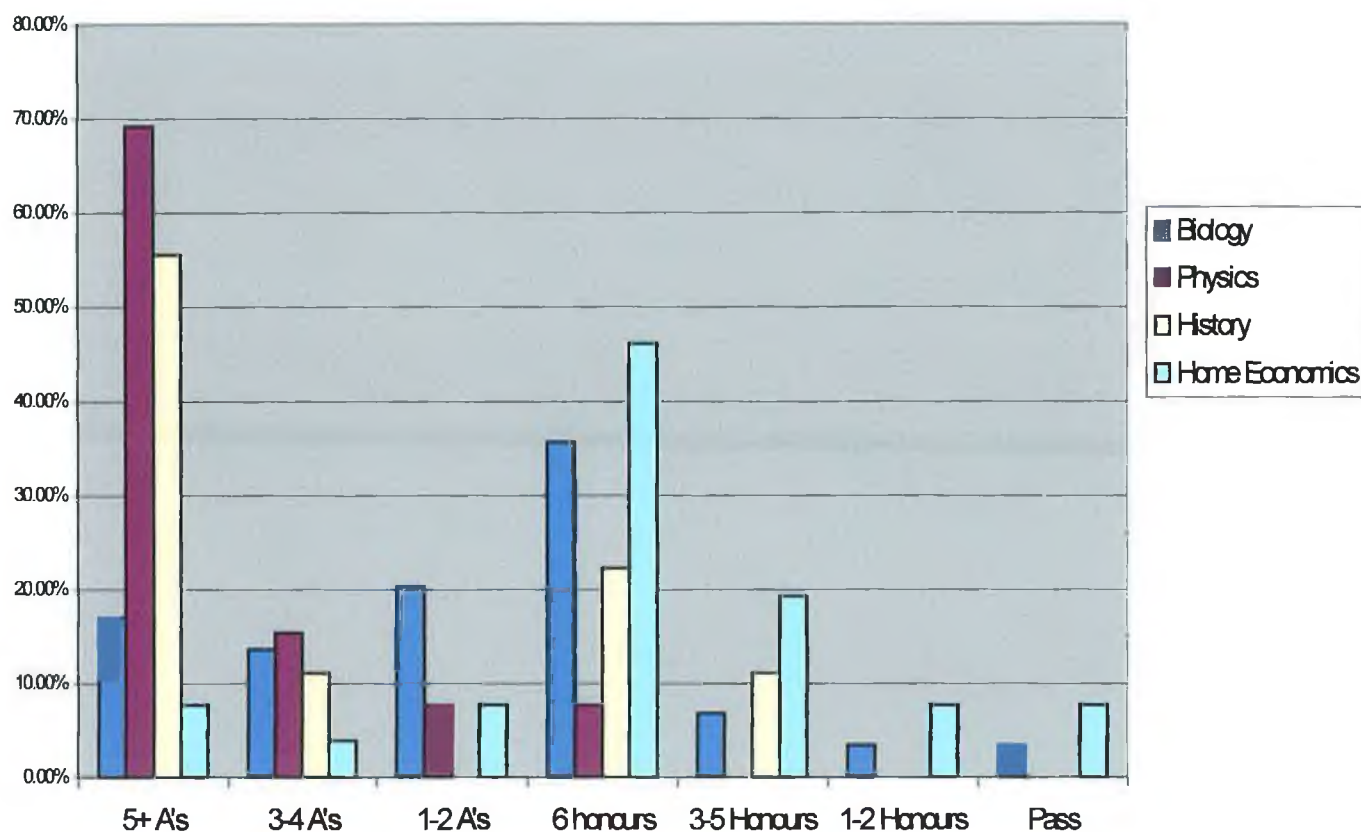
A similar, indeed more pronounced pattern shows up with Physics. Here again there is the expected distribution of grades for Cohort 2, but for those in Cohort 1 nearly 70% of the class are in the first bracket and none from the last three brackets are represented.

The inverse pattern appears with the subject Home Economics. With those that are taking this subject for Leaving Certificate 2003, Cohort 1, over 80% are in the last four result groupings and for those in Cohort 2 there are no students from the first two groupings and over 70% from the last four.

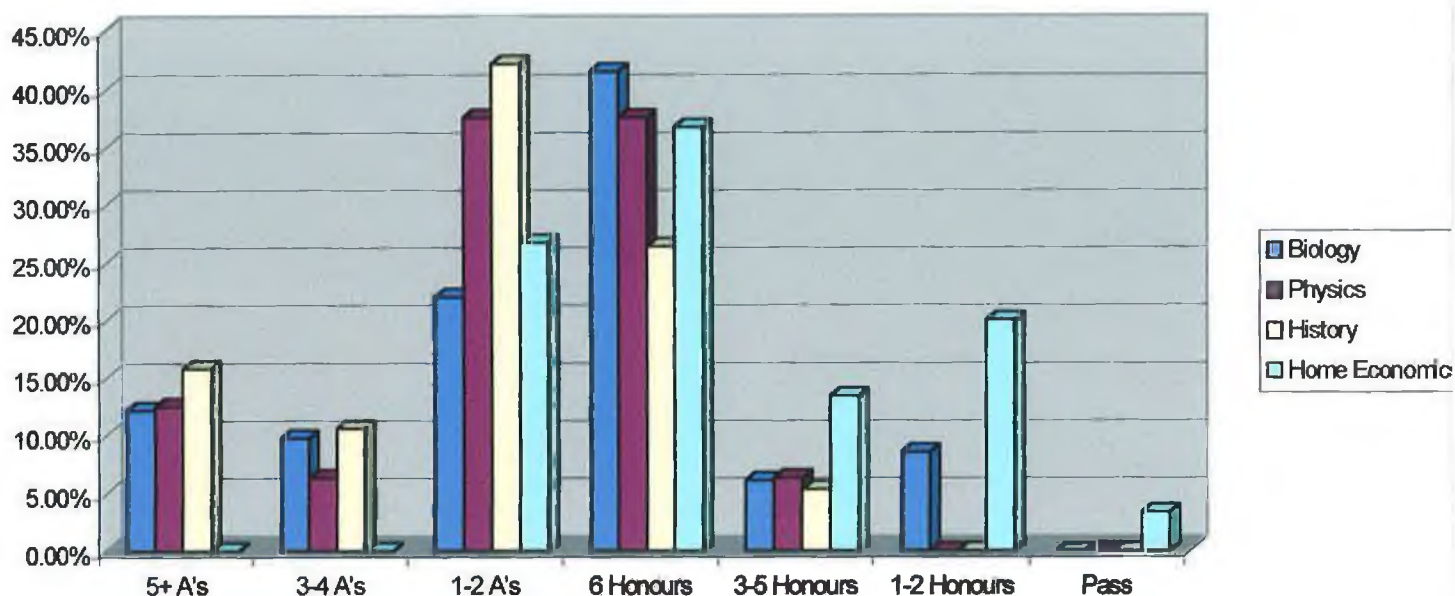


The only subject that consistently follows the normal curve, that one would expect to find, is Biology. In both years the majority of students come from the middle grouping, with an even spread either side of the norm.

**Figure 43(a) Cohort 1**  
**Grades Obtained in Junior Certificate and Subjects Chosen**



**Figure 4.3(b)**  
**Grades Obtained in Junior Certificate and Subjects Chosen**  
**Cohort 2**



This correlates nicely with the graphs of overall results, figure 4.2 (b), and echoes the above table for national figures showing well over half of female students study Biology for the Leaving Certificate.

There is an imbalance, based on grades achieved in Junior Certificate, amongst students choosing History, Physics and Home Economics however Biology has a more even distribution.

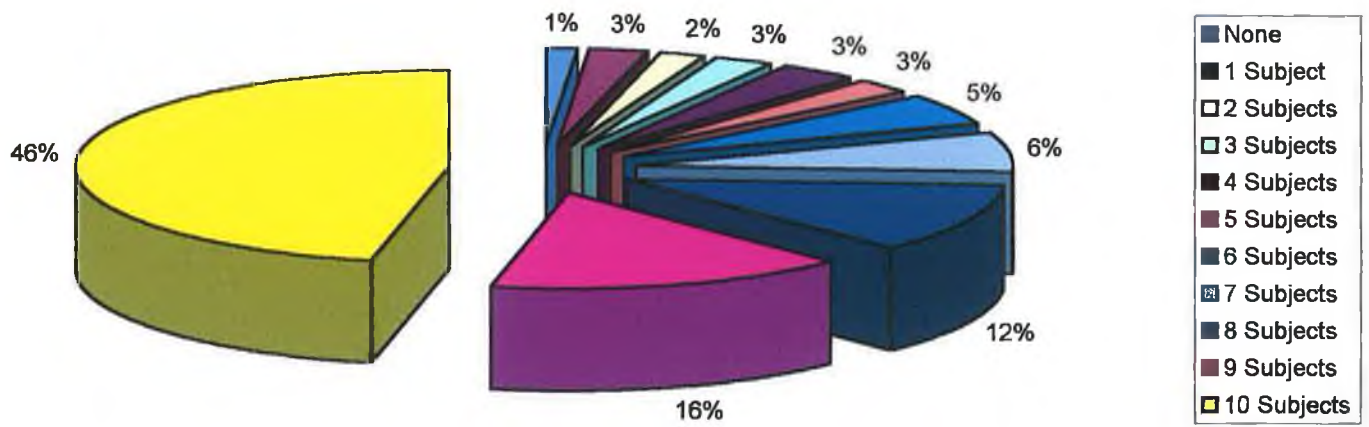
## **Number of Subjects Taken at higher Level for the Junior Certificate**

The next set of data that was looked at was the number of subjects that were taken at higher level by students. As mentioned in the school profile each student must do ten subjects for the Junior Certificate and therefore this is the maximum number of subjects that can be studied at higher level. (In Irish, English and Maths there are three levels; syllabus A, B and C, in all other subjects there are two levels Higher and Ordinary level). The cohort looked at here is cohort 2, as this is the group that showed a more even distribution of grades in the four subjects looked at. The question is now to see if that more balanced spread of grades is also reflected in the numbers of students, in each class, that had taken most if not all of their subjects at higher level in the Junior Certificate.

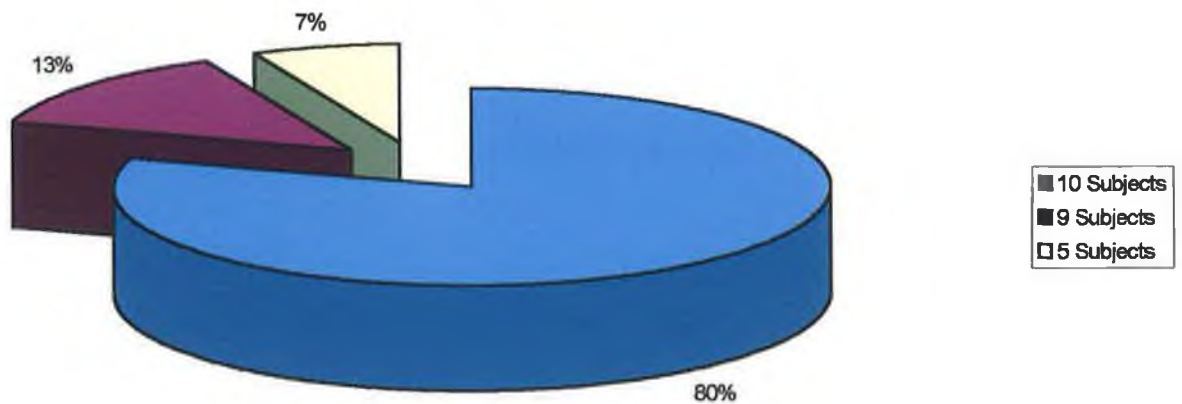
Figure 4.4(a) gives the overall picture for that year with regard to numbers of subjects studied at the higher level. As can be seen the nearly half of the students had, in their Junior Certificate, sat all papers at higher level. 85% had taken the majority of their papers at higher level, 46% sitting all ten at this level. Only 15% of the students in the year sat five or less 'honours' papers. An even distribution of students would mean that approximately half of the students, in each class, had taken ten subjects at higher level in the Junior Certificate.

Figures 4.4 (b), (c), (d) and (e) give the breakdown for the Physics, Biology, History and Home Economics classes respectively.

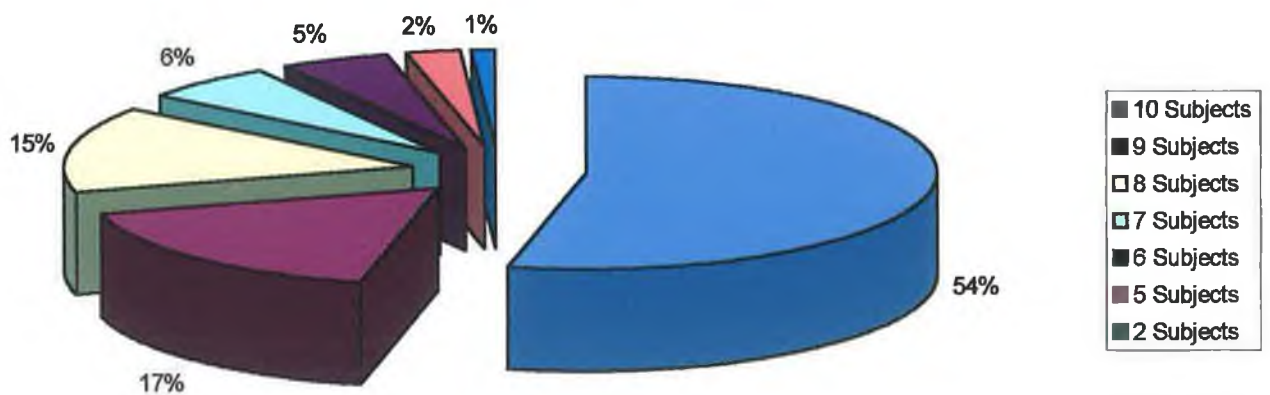
Figure 4.4(a) Number of Subjects Taken at Higher Level, Cohort 2.



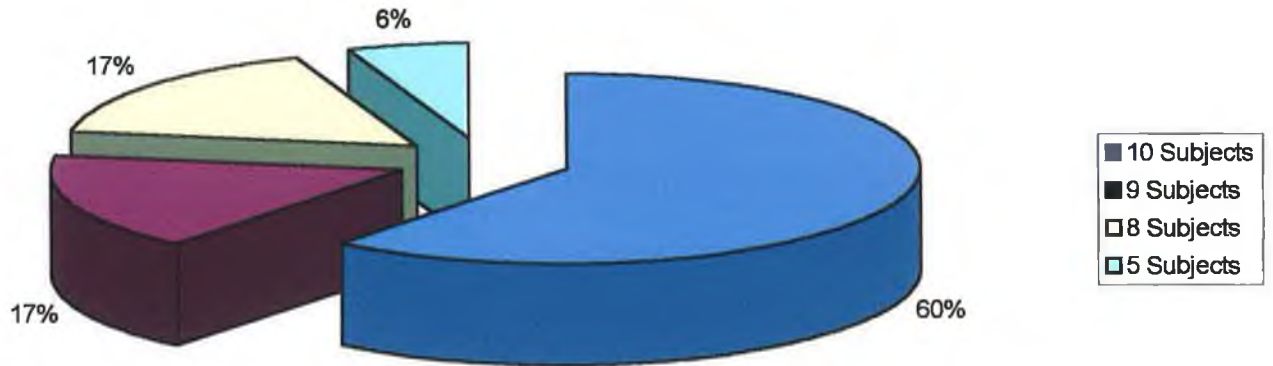
**Figure 4.4(b)**  
**Number of Subjects taken at Higher Level, in the Junior Certificate Examination, by Physics Class, Cohort 2**



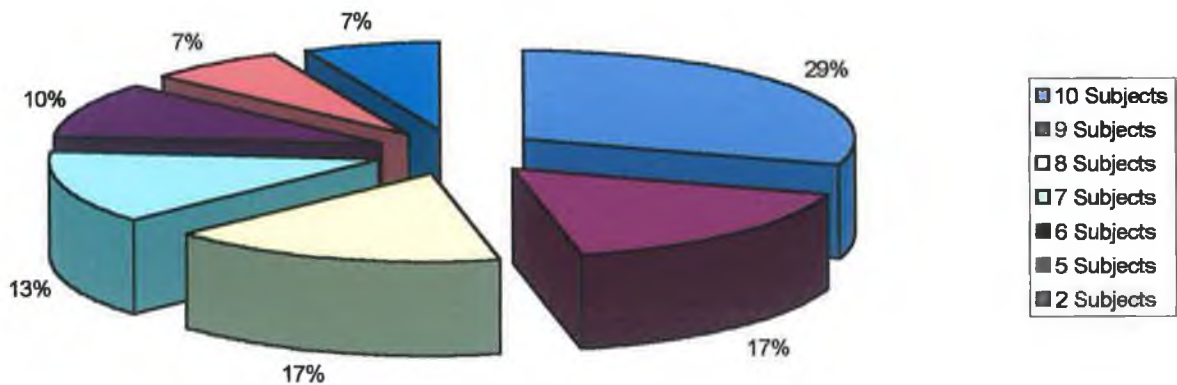
**Figure 4.4(c)**  
**Number of Subjects Taken at Higher Level, in The Junior Certificate Examination, by the Biology Class, Cohort 2**



**Figure 4.4(d)**  
**Number of Subjects Taken at Higher Level, in the Junior Certificate Examination, by History Class, Cohort 2**



**Figure 4.4(e)**  
**Number of Subjects taken at Higher Level, in the Junior Certificate Examination, by the Home Economics Class, Cohort 2**



Once again the Physics class contains academically more able students, as 80% of those choosing physics had taken ten higher level papers and no-one with less than seven. A similar picture applies to History where 60% had ten such subjects and nobody less than six.

Biology, the second science subject looked at, once again shows a more even distribution but even here there is higher than the average number of students in the first category and only 6% with five or less, when the year average is 15%.

The opposite pattern emerges again with Home Economics. The number of students choosing this subject having taken 10 higher level subjects at Junior Certificate is well below the year average and, of the four it has the highest number in the five or less categories, 14%.

Taking the number of Junior Certificate subjects studied at higher level as an indication of academic ability shows, once more, the more academically able in the high profile subjects.

One way of interpreting these findings is that the students that have chosen to do Physics and History may not have achieved as well as they hoped in the Junior Certificate (the results from Junior Certificate 1999 are lower than Junior Certificate 2000 [fig.4.2 (b)] ), however they are still the students that were confident enough in their own ability to attempt ten subjects at Higher level in the examination.

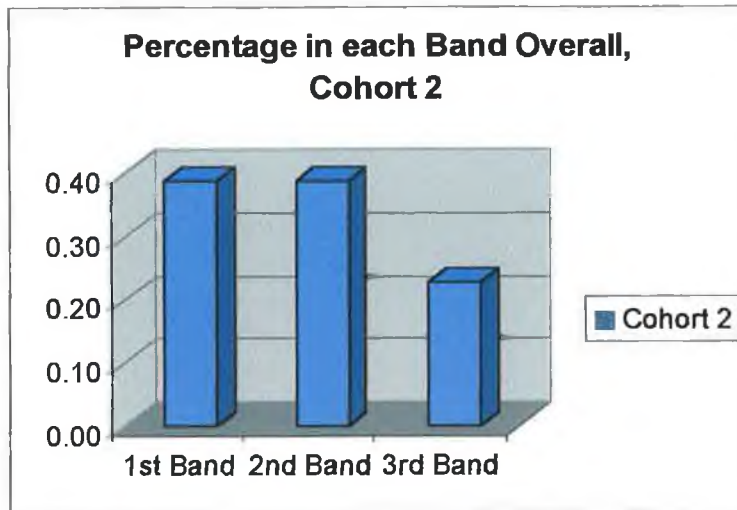
This positive academic self-image could mean that certain subjects, that are regarded as challenging, are not shied away from and that this confidence in one's own ability, once established, is not diminished by actual grades achieved.

Measuring this self-image proved elusive, as I will discuss later, but as a further indicator that may clarify this issue the 'band' the student was in for Junior Cycle was looked at.



## Band Students were in for Junior Cycle

Figure 4.5(a)



For those sitting the Junior Certificate in 1999, Cohort 2, there were six class in three bands, based on the assessment test that each student sat before entering the school. The first two bands are of equal size but, to allow for a lower pupil teacher ratio, the two classes in the third band were smaller, hence the percentage differences shown above. As was already discussed the class a student was in did not limit the subjects they could study or the level they could study them at.

Similarly once a student was in Transition Year they were free to sample any subject they wished and from there to choose the subjects they wanted for the Leaving Certificate. There is no formal policy of allocation that limits the subjects students can chose.

Figure 4.5(b) shows the percentages from each band that chose the four subjects that are being looked at and the discrepancies are obvious.

In the Physics class there are no students that were in band 3 for Junior Cycle and a higher percentage from band 1 than from band 2 (56% as opposed to 44%). History has a slightly more balanced class but still has an over representation from band 1 and an under representation from band 3. Once again the class that follows most faithfully the expected percentages, with 23%, the same as the year's percentage, from band 3, is the second science Biology.



As was the case in the previous finding Home Economics continues to have a concentration of students from the academically weaker classes, with more than double the expected number, over half the class, made up of students that were in the third band for the Junior Cycle.

**Figure 4.5 (b)**  
**Band at Junior Cycle and Subjects Chosen, Cohort 2**

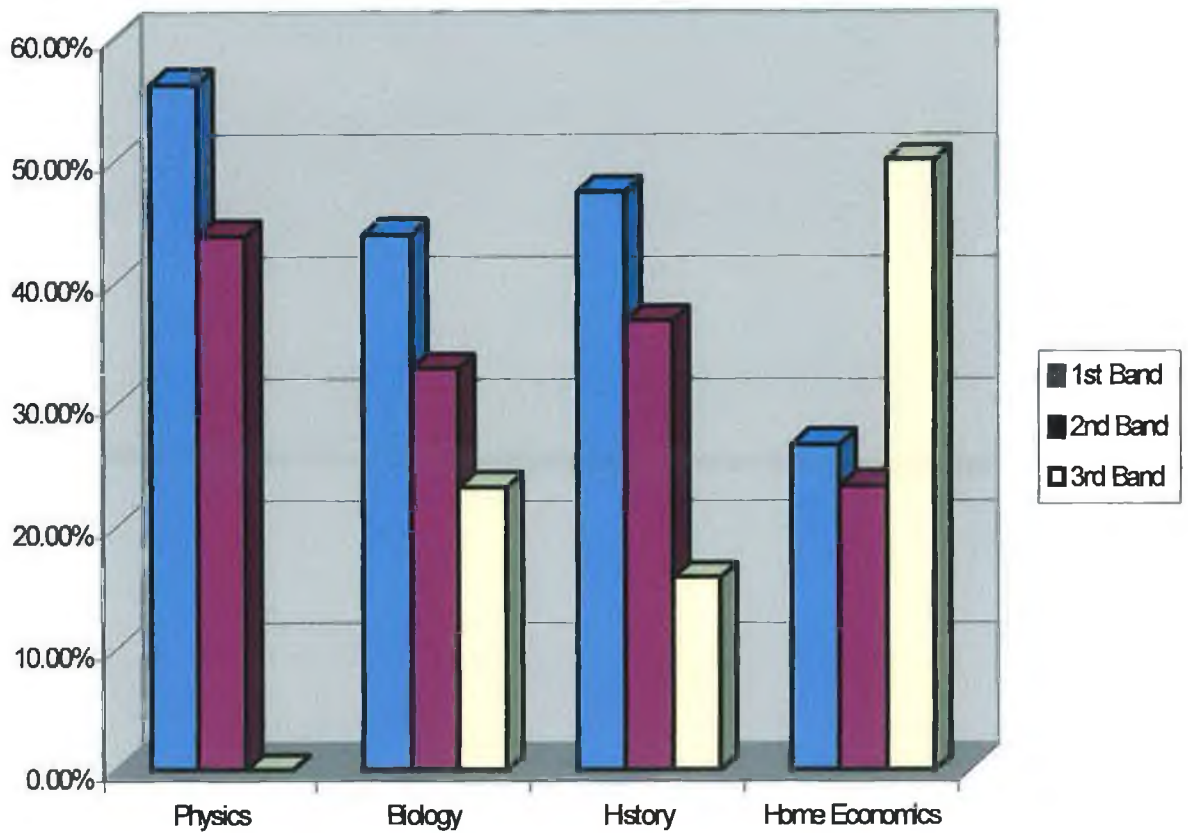


Figure 4.6(a)

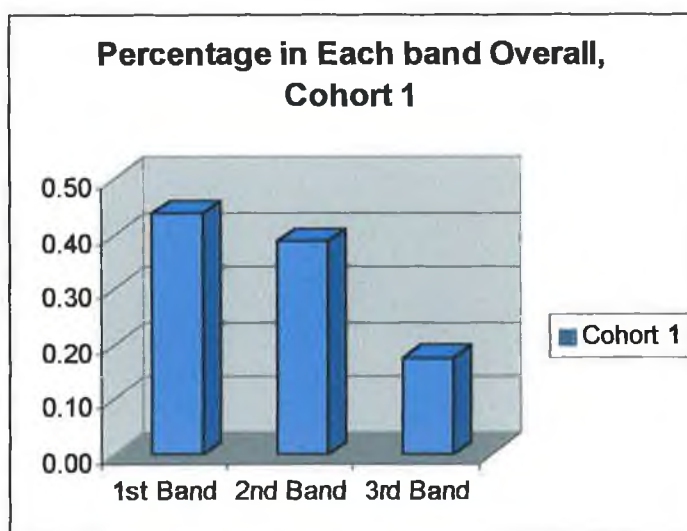


Figure 4.6(a) and (b) shows the corresponding percentages for cohort 1 and here once again the picture is repeated, with no student from the third band in the Physics class and under represented in the History class.

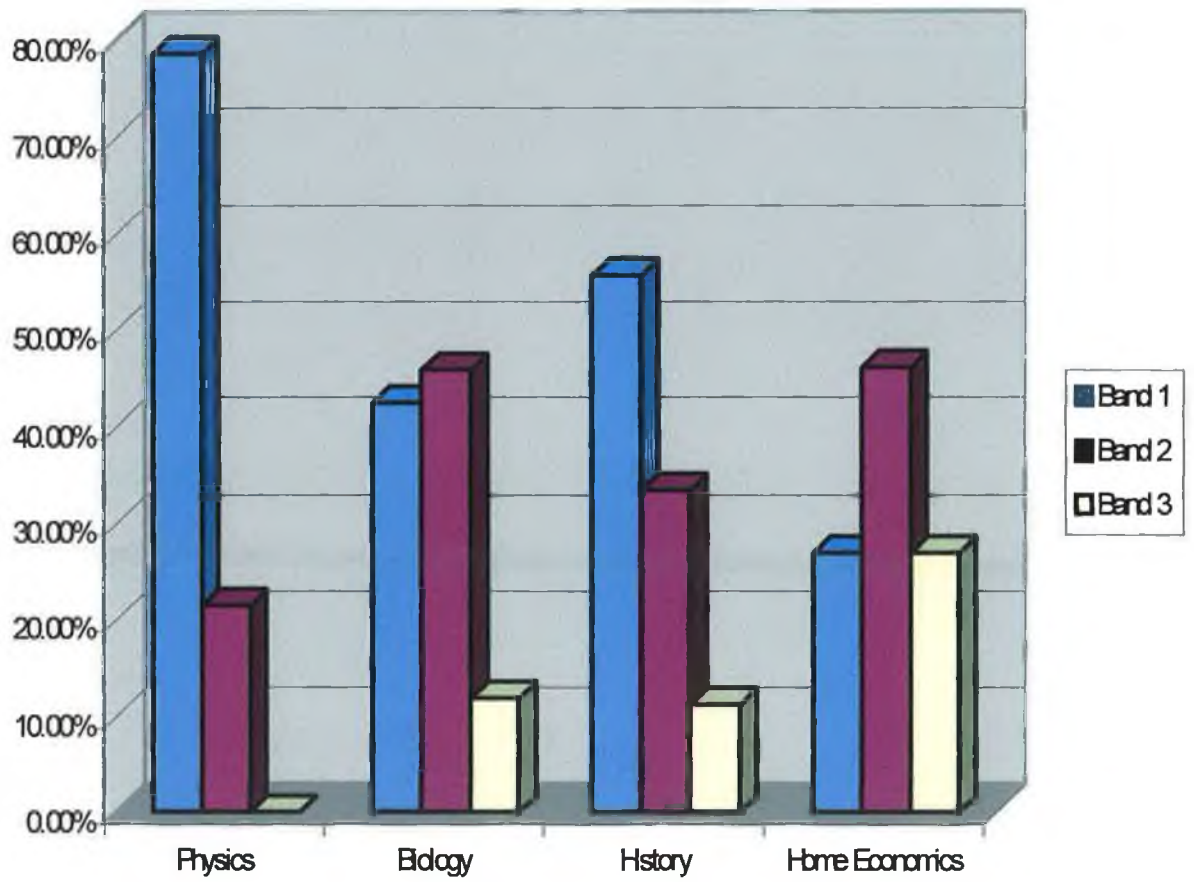
This group is, however, under represented in the Biology class also. As can be seen from Figure 4.6(a) above band 3 constituted a smaller group in this year, just 18% of the overall year, but in the Biology class they make up only 12% of the class.

They are not as conspicuous in the Home Economics class, but still, at 27%, above the proportion expected for the year.

Students from the top bands in Junior Cycle are concentrated in the high profile subjects.

Thus once again the emerging picture is that the high status subjects are dominated by the students who, from day one in the school, are deemed to be the more academically able students and hence are in the top band. The academic self-image that was mentioned earlier is at this stage either established or reinforced by such banding. Top band students that attempt most if not all their Junior Certificate subjects at higher level continue in the subjects that are regarded as difficult and challenging, regardless of the grades achieved in the actual Junior Certificate.

**Figure 4.6 (b)**  
**Junior Cycle Band and Subjects Chosen, Cohort1**



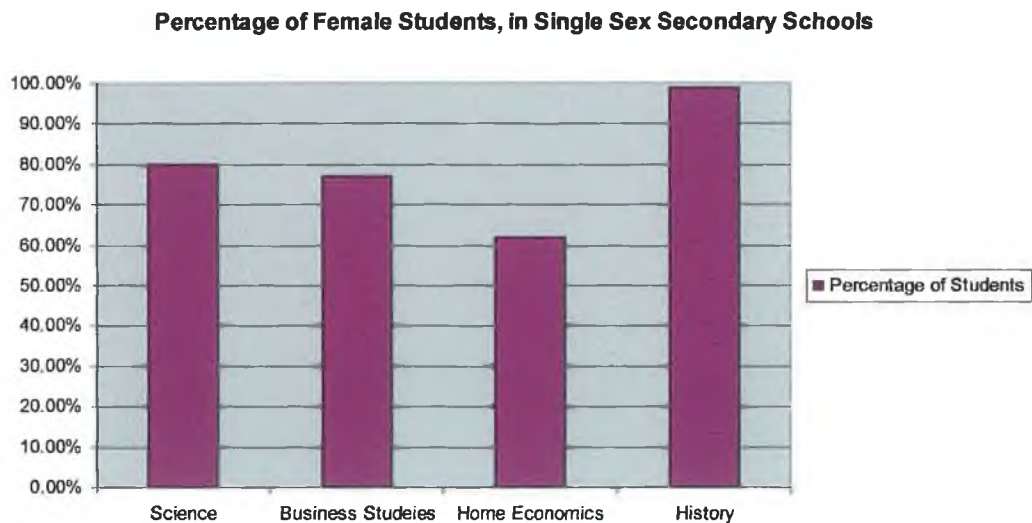
## “Image is everything”

### Choices made for the Junior Cycle

The options that the students feel are open to them for Senior Cycle, sampling aside, may depend on the choices that they make before they enter the school. All students, or perhaps more accurately their parents, are given a free choice as to the subjects that they wish to study at Junior Cycle. There are no restrictions based on the band in which their class is placed, the only advice is that those less able academically should avoid two continental languages.

One could expect to find, therefore, an approximately equal percentage of each band, in each subject. This is the case in Business Studies, for example, where three quarters of the students from each band pick this subject for the Junior Certificate. This also matches the national picture for percentages of students, in Single sex girls' secondary schools

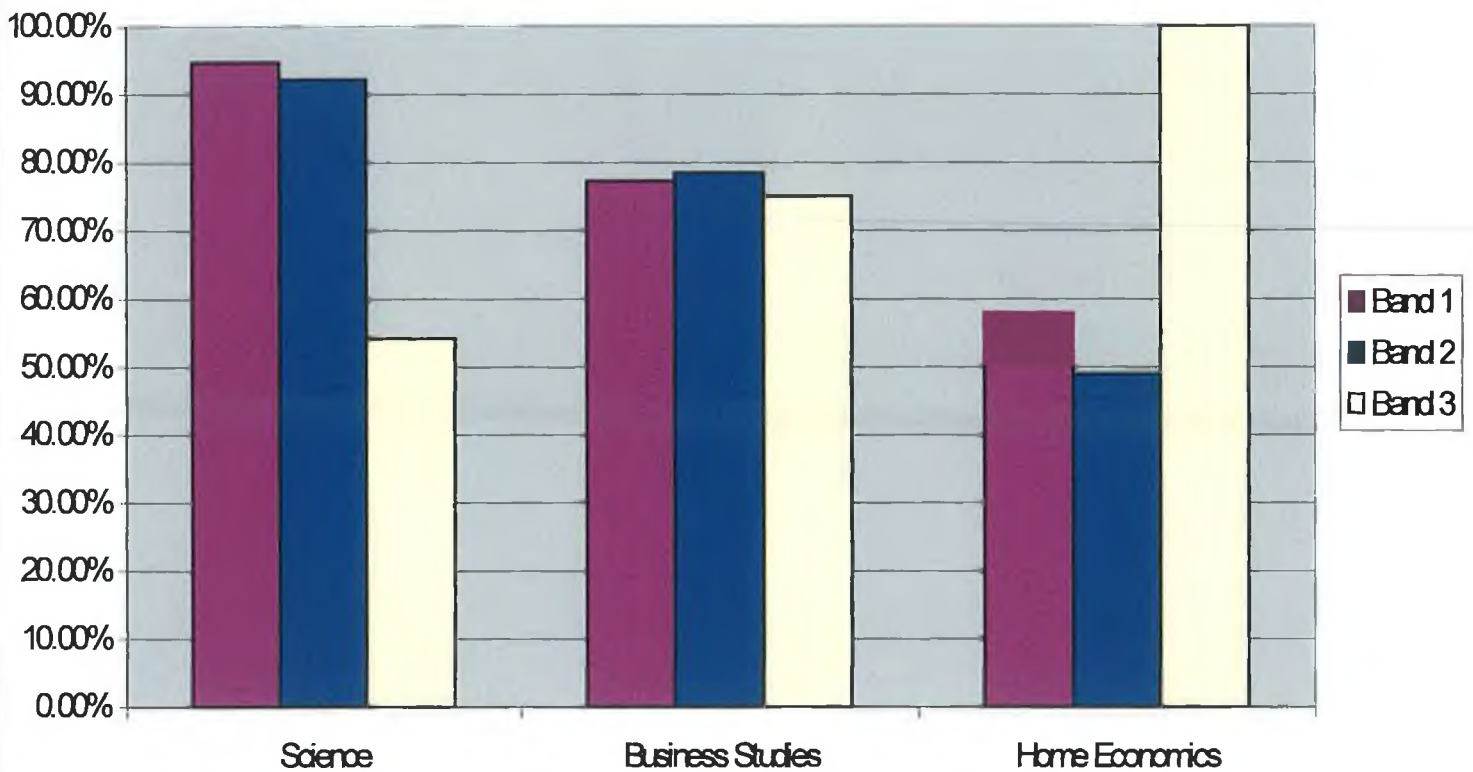
(Figure 4.7 (a), below).



(Department of Education and Science, *Statistical Report 1998/1999*, p.68)

It is not the case in the subjects Home Economics and Science, where there is a marked difference in the percentages from Band 1 and 2 and the percentages from Band 3 that have chosen these subjects, as shown by figure 4.7 (b)

**Figure 4.7(b) Percentage of each Band that Studied Subjects for Junior Certificate**



Half the students in band one and two chose Home Economics as one of their subjects, less than the national average. In the third band however all of the students were studying this subject. Finally, over 90% of the students in the first two bands pick Science while just over half of those in Band three do so. As we said already this might, to some extent, limit the options that the students feel are open to them for Leaving Certificate (Sampling in Transition Year may mitigate this).

What the figures do imply is that at a very early stage in their second level education students are excluding themselves from the subjects they feel are more difficult or academically challenging and making choices that have long term implications for their education.

### **Grades Achieved in Choice Subjects in Junior Certificate**

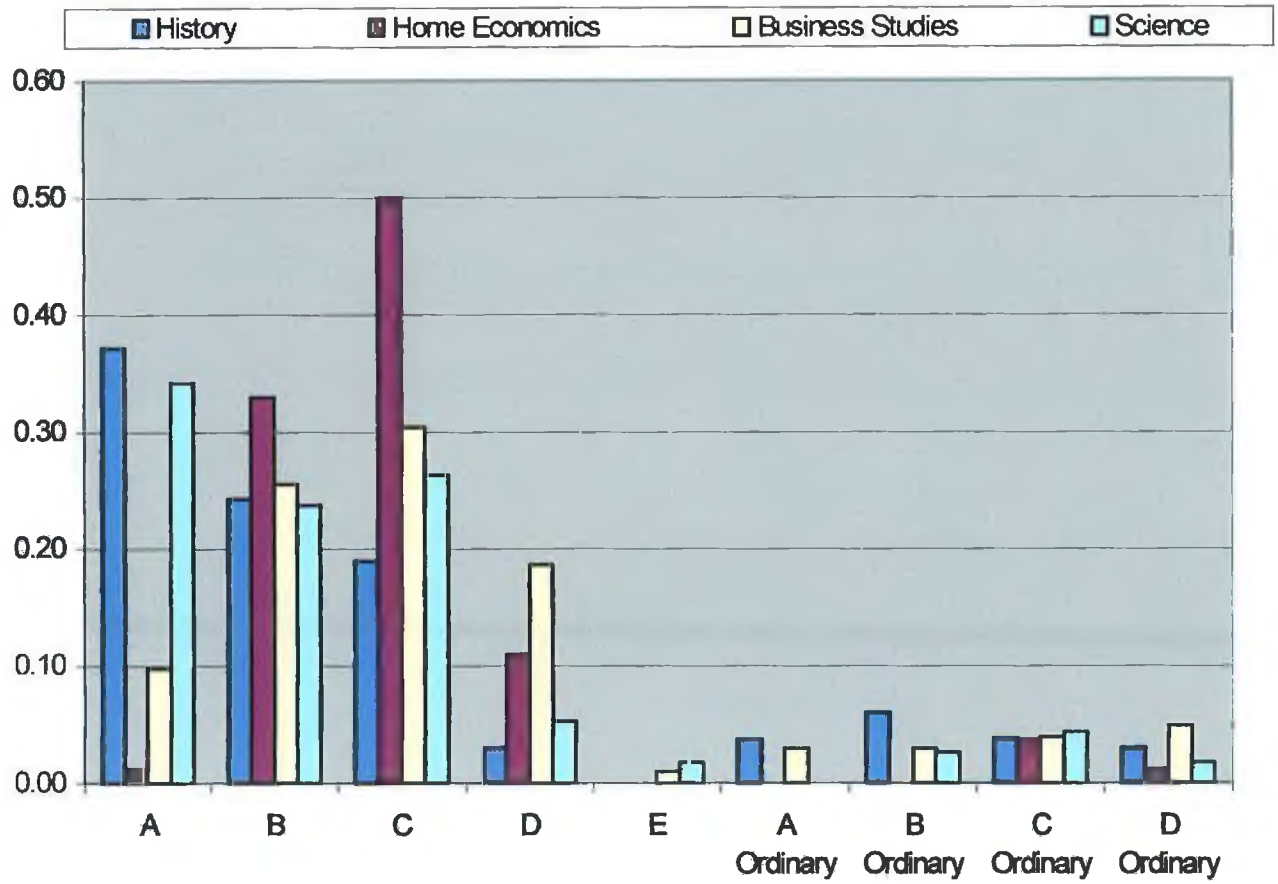
Having made these choices the next question is to see how the students perform in these subjects. To investigate if they do better in a supposedly 'easy' subject like Home Economics compared to Science. For comparison Business Studies will also be looked at, as there is an equal percentage of each band choosing this subject, indicating a relatively neutral status with regard to difficulty.

The fourth subject that I will look at here is History. All the students study this subject as tends to be the case in all schools, (Fig.4.7 (a)), and it does not subdivide, as do Science and Business Studies, following the Junior Certificate but can be continued through to Leaving Certificate. Very few students chose to do this however and it is viewed as a difficult subject, taken only by a minority.

If this were true one would expect to see students do far better in Home Economics than in History, this is not the case as Figure 4.7(c) shows.

As one can see, overall for the year, students achieved higher grades in Science and History than they did in either Home Economics or Business Studies. Over one third got a grade A on a higher level paper in both of these subjects while less than 10% got the same grade on higher level papers in either Home Economics or Business Studies.

**Figure 4.7(c)**  
**Grades Achieved in Junior Certificate Examination by Cohort 1**





While band three students only constitute 18% of the cohort these students are, as already stated, over represented amongst Home Economics students, making up 30% of those studying the subject. Conversely they are under-represented in Science making up only 10% of this group. Thus to get an even clearer picture of the grades achieved the next two graphs show the grades for Band one and two followed by those for band three. (Figure 4.7(d) and (e))

Looking at figure 4.7(d) one can see that, of the four subjects, History and Science are the most successful subjects for the students in terms of grades achieved. A large majority, 45% of the students, got a grade A on the higher level History paper, only a small minority from these bands did not get an honor on this paper. Similarly in Science most of the students reached 'A' standard, nearly 40%, with 27% getting a B and the same getting a C.

Looking at the grades achieved in band three alone (Figure 4.7(e)), one can see that while the students in this group did do better in Home Economics than History at higher level, they all passed the paper, and over a third achieved an honor.

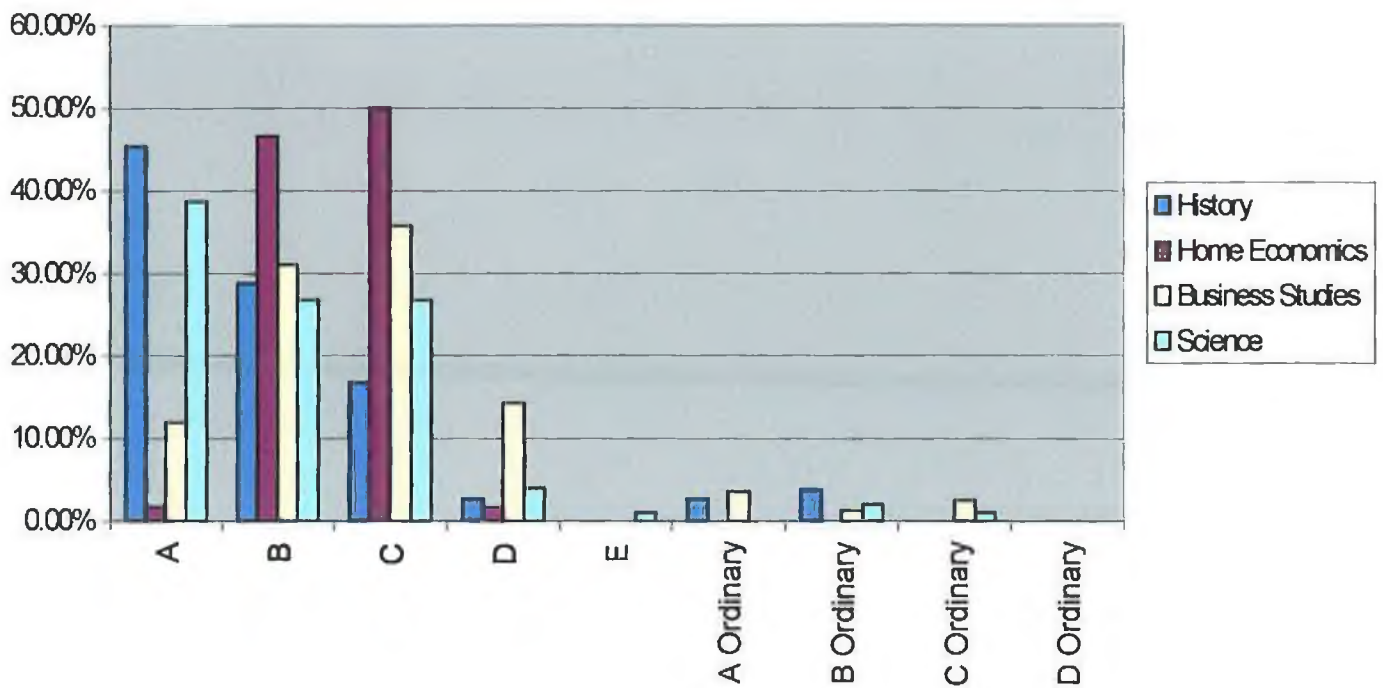
When the students sat this paper at ordinary level the majority attained an honor here also. In band three all the students studied these two subjects while not all picked Science and Business studies. When the grades in these two subjects are compared again we can see that, while those studying Business did better over all, the majority of students taking higher level Science paper did pass, over one fifth achieving an honor. When one looks at the ordinary level paper students did better in science than in Business Studies at this level.

History is one of the most interesting of the subjects looked at from this point of view because, as one of the core subjects it is studied by all the students and, by and large the students do well at this subject. As the above graphs show most pupils in the top two bands get an 'A' grade at higher level. For the students in the third band the grades they get in History are relatively good, holding their own against other subjects such as Business Studies. However the students have decided that History is a difficult subject and hence very few picked it for Transition Year and, of those that did, very few continued with it into Fifth Year.

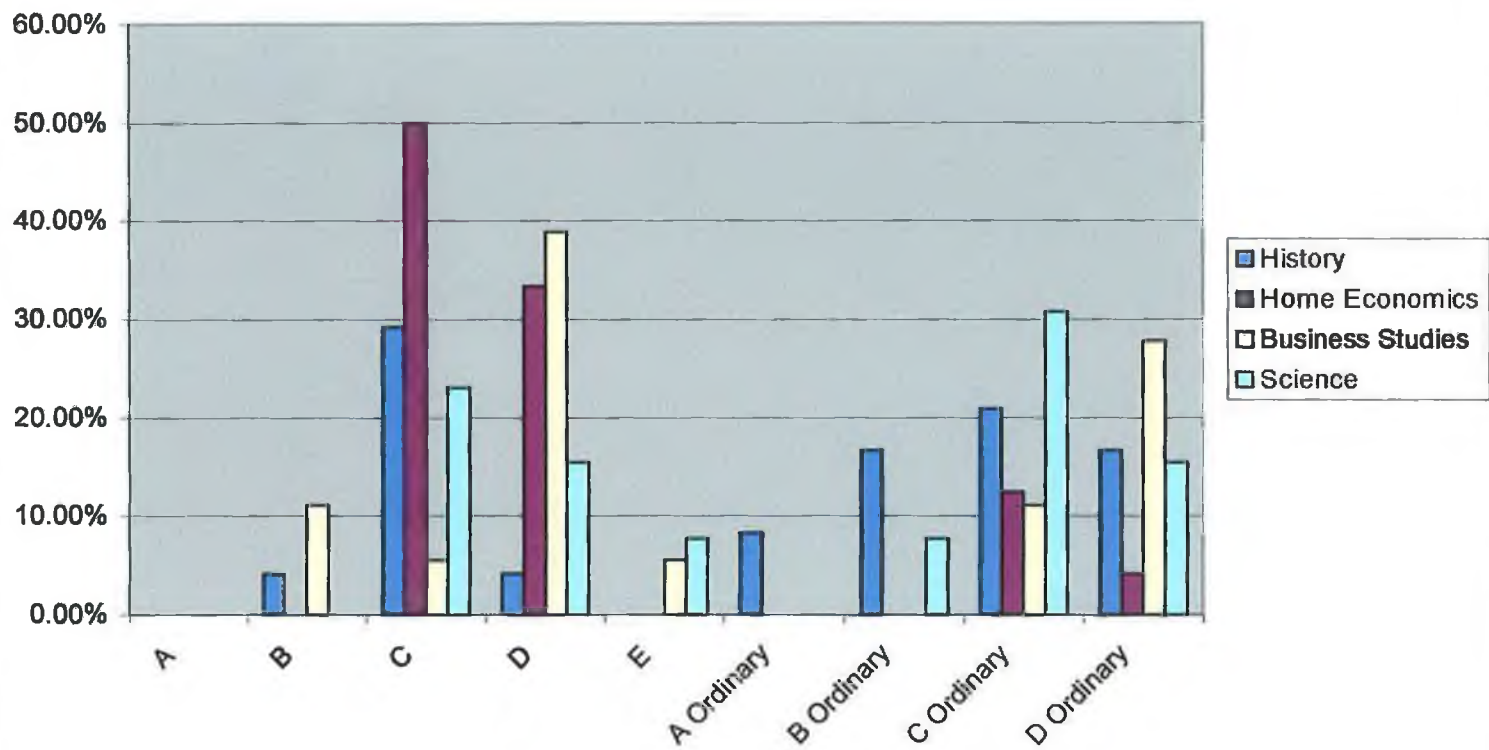


What this would seem to suggest is that the perception of a subject, as either easy or difficult, is established before the student enters in to the Junior Cycle. Once the image of a subject has been established it is very hard to change it, even the students themselves succeeding in it has very little effect.

**Fig. 4.7(d)**  
**Grades Achieved in Junior Certificate By Students in Band 1 & 2 (Cohort 1)**



**Figure 4.7(e)**  
**Grades Achieved by Students in Band 3**



## Influences on Subject Choice

The next issue looked at was what influences the students themselves felt were a factor in their choices. To try and elicit this information a list of six possible factors, with an option for them to add a seventh if they so wished, were drawn up. The list was compiled as a result of both responses given in interviews and on the questionnaires and the students were asked to rank these, one to seven, in order of importance as a factor influencing their choice of subject. The students, for the most part, did fill in the table given, and ranked the options one to six, but many were reluctant to continue beyond three or four, stating that the remaining options were so small a factor they didn't warrant a mention. Only the students that felt there was another reason that had not been covered filled in a '7', their alternative reasons are mentioned later.

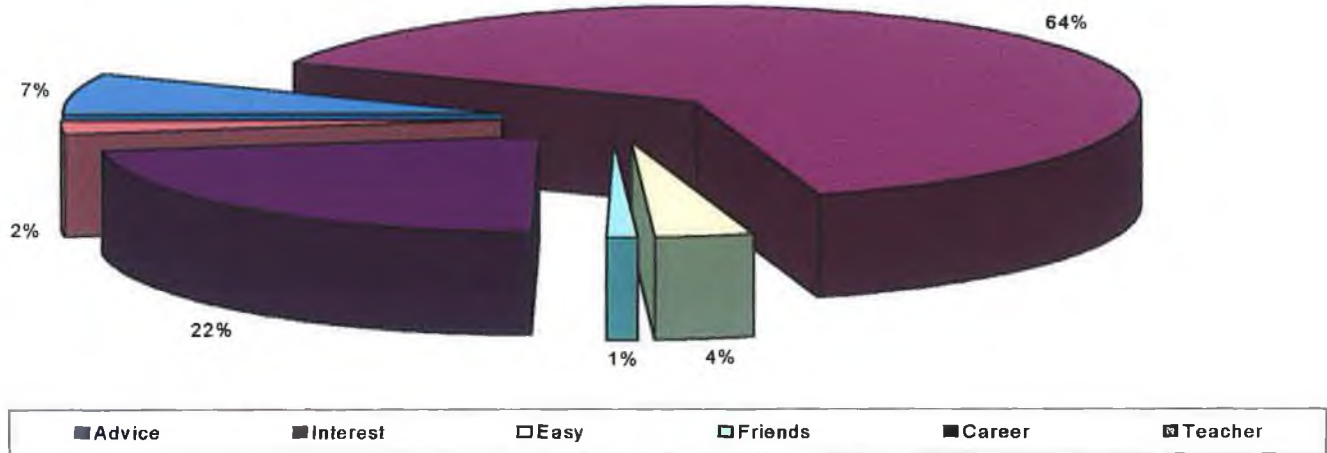
Therefore when looking at the percentages in figure 4.8(b) it is important to note that influences five, six and seven are of very little significance.

Overall the most important factor, as the students saw it, when it came to making subject choices was 'interest'. Over 60% of the students ranked their interest in the subject as the main influence on them when choosing the subject, as illustrated by figure 4.8(a). The only other option that was significant as a main factor influencing choice was 'career'. In other words benefits and requirements of possible future jobs, careers, college places and courses played the main part when it came to deciding subjects for the Leaving Certificate for over 22% of the students, with 35% and 27% citing it as the second and third most important factor respectively.

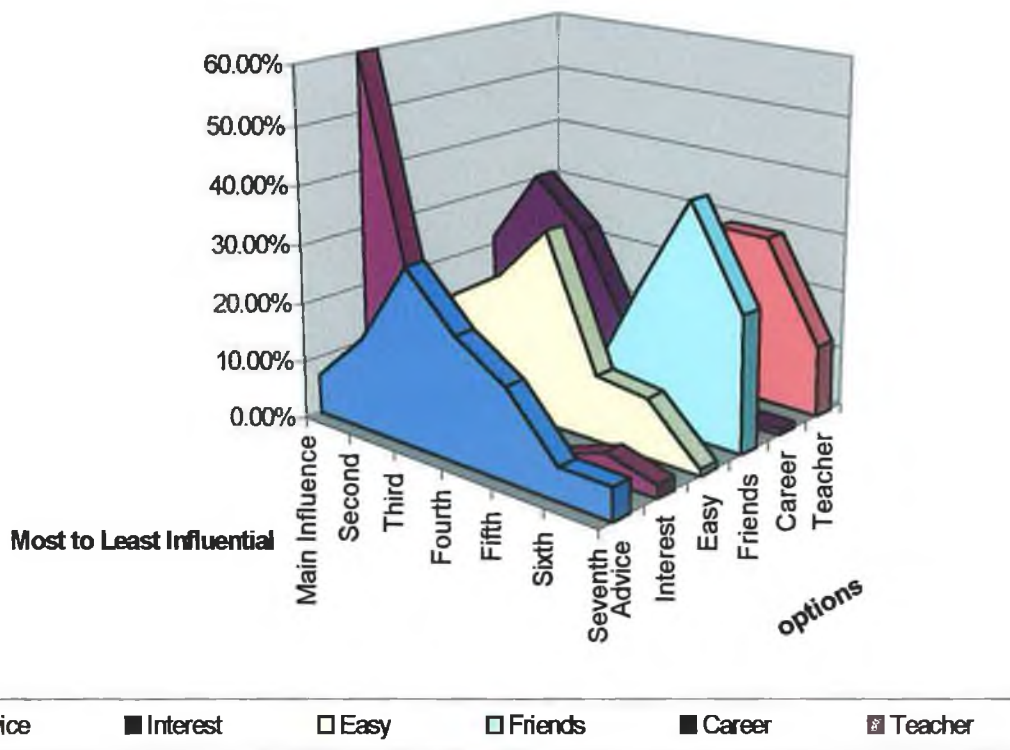
For the third most important influence 30% of the students picked advice. This includes advice from parents, friends, older siblings as well as teachers and career counsellors. Also a factor of this ranking was how easy, or not, the student found the subject. These two factors continued into the fourth ranking with advice being listed by over a fifth of the students and how easy the subject is by a third.

The factors that were not really considered by the students as having any influence on them were 1: the teacher they might get or 2: whether or not they had friends that would be in the same class.

**Figure 4.8(a)**  
**Main Influences on Subject Choice**



**Figure 4.8(b)**  
**Influences on Choices, Cohort 1**



On this last point it is worth considering the fact that as an all girls school, with an academic ethos and tradition, there is not the pressure to conform to certain expectations by choosing certain subjects. The situation might be different in a mixed school where identity and belonging could be tied to the subjects that a student chooses. For example picking Home Economics over Physics may be more a product of friends also being in this class over a potential, intangible, future career when a student might end up the only girl, or indeed boy, in another class.

It is certainly easier to be future orientated when the subjects you pick will not exclude you from your own sex, or contemporaries, as a young adolescent.

The major influences when it came to picking subjects, as the students see it, are...

1: Interest 2: Career 3: Advice 4: How easy the subject is.

### **Other Influences**

The list that of options that was offered to the students was drawn up based on their own comments in the questionnaires. There were some other possible influences, or at least different interpretations of options offered, that the students themselves mentioned as a seventh choice.

The phrases “I will do well in it” and “am good at it/able for it” were offered, by the students, as another influences. They obviously felt there is a distinction between subjects that are “easy” and they themselves succeeding in a particular subject. Also mentioned by students was the fact that they felt it appropriate to have at least one Science and one Business subject at Senior Cycle. This factor came up again and again in both interviews and questionnaires and will be looked at later in more detail.

Another factor offered by students was “good for points”, again a distinction was drawn by these students between subjects that would benefit them in a future career and one that would help them get into a course or into college in the first place. The same applied to those that wrote down “compulsory for a course” as a reason.

Other students felt that “interest” was not the same as “like” or “enjoy” and wrote those as reasons for choosing as they did.

Quite a few also put more general reasons, such as having a variety of subjects, a broad education and knowledge and skills that will benefit them through their lives. There were also the students who, once they had eliminated what they didn't like, had no other subjects left to chose from!

### **Link between Home Economics and Biology**

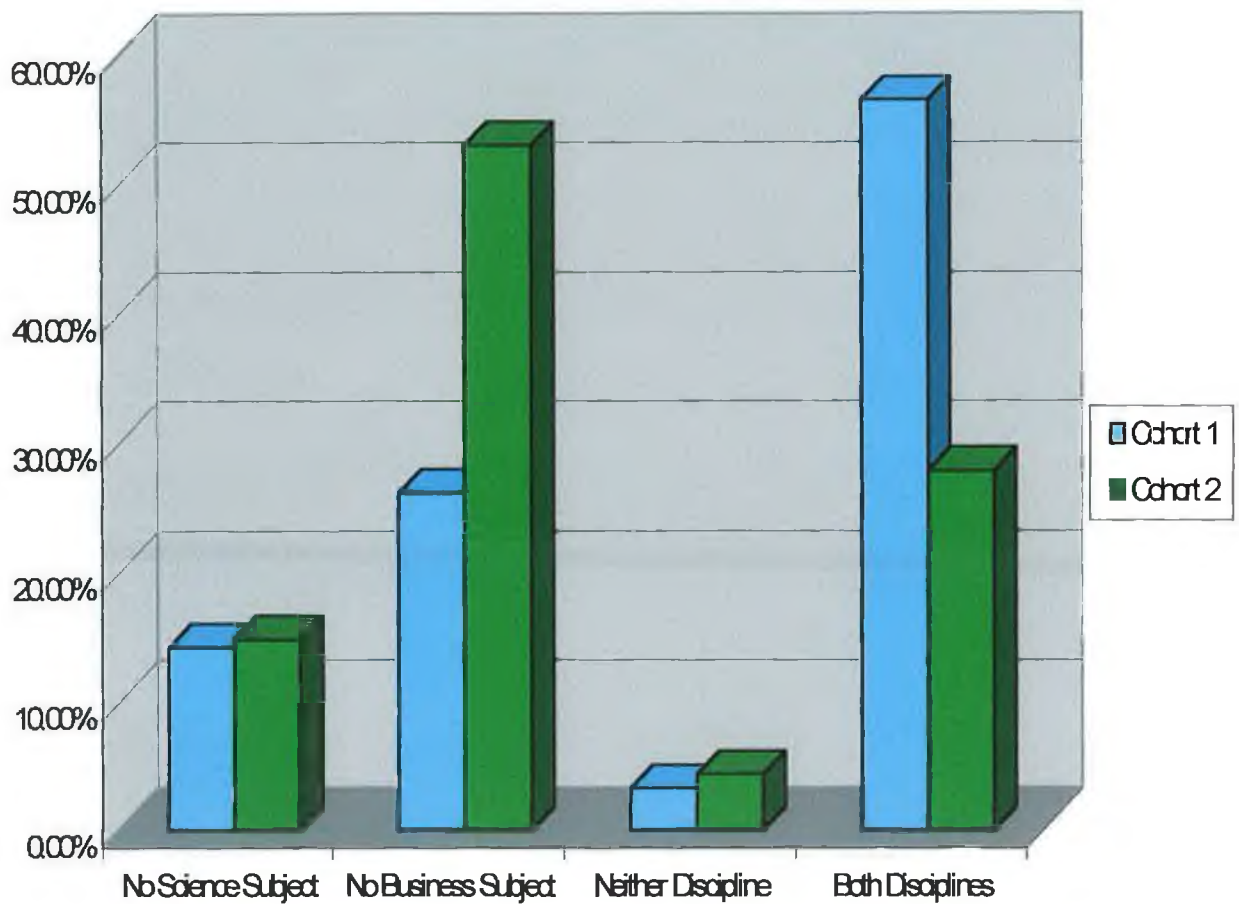
In the course of the interviews the link between Home Economics and Biology was mentioned by students as both as reason for choosing one of the subjects and as a reason for not doing so. As one student put it “I had two Sciences and Home Economics would be like having three Sciences and I don't want that”, while other felt that doing both Biology and Home Economics was a good idea as they complement each other. Looking at the composition of the Home Economics class it is clear that this link is one that many students reckon to be beneficial. Nearly 60% of the class have also chosen to study Biology as their science subject. Only one student of Home Economics is also doing Physics and one student in the class is doing Chemistry and Biology as well as Home Economics.

Biology students are also represented in the two high-profile subjects. 40% of the History class are also doing Biology, as are nearly 30% of the Physics students (however this, when one considers the respective class sizes, equates to far fewer students). What it does imply is that Biology is the subject that reaches across all the bands and all the grades, a neutral, in terms of status, subject.

There is a perceived link between Home Economics and Biology that may account for the fact that nearly two thirds of those choosing Home Economics also picked Biology.

## One Science and One Business

Figure 4.9  
Students Taking 1 Science and/or 1 Business



Another issue mentioned by the students, as having an influence, was the fact that it was recommended that students take at least one Science and one Business subject. Figure 4.9 shows the percentages from each year that heeded that advice from the career's teachers.

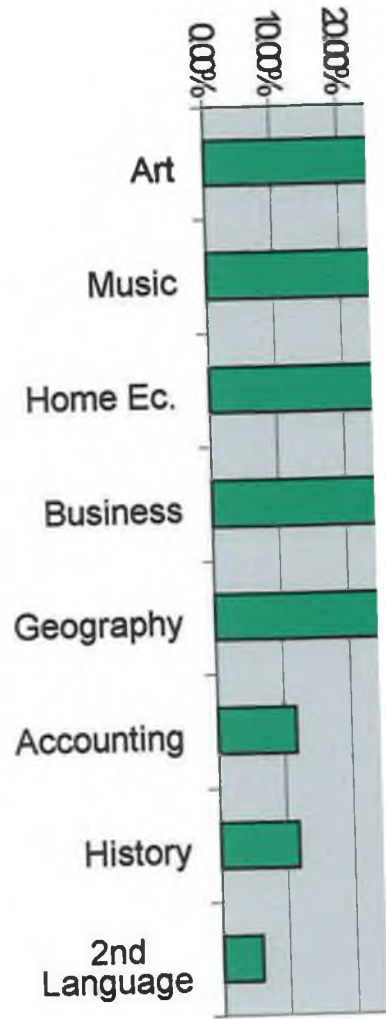
The idea behind this policy is that, should a student be unclear at this stage as to what they would like to study at third level, in addition to a European Language having a Science and Business subject will allow them the greatest flexibility in the future.

Students that at this early stage are more confident about what they would like to do in the future or, more usually what they definitely don't wish to do, can make a decision to leave out one or both disciplines. As can be seen in figure 4.9 students rarely leave out both and only approximately one in ten students leave out a science subject. With Cohort 2 quite a high percentage decided at this stage not to continue with a business subject. This corresponds to figure 4.1(a) where we saw that, after French and Biology, the third most popular choice was Geography for this year. With cohort 1 the fact that Business was the third most popular subject means that the majority of students have both disciplines represented in their subjects for the Leaving Certificate.

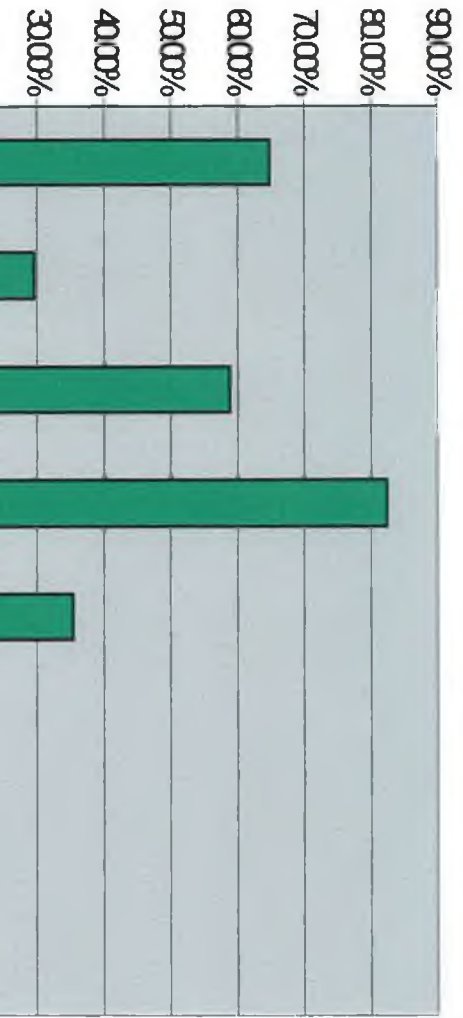
When those students that have chosen not to take a Science subject are further looked at the majority of them chose either Art or Music coupled with either Business or Home Economics (Figure 4.10). While there are students from all abilities represented in this sub-group the majority are mid-ability to less academically able but as already stated represent a small proportion of the entire cohort.

The Majority of students keep their options for the future open by choosing one Business and one Science subject at Senior Cycle





**Figure 4.10**  
**Other Subjects Chosen by Those Not Studying a Science Subject**



## Section 2

### Effects of Transition Year on the Subjects Chosen

#### Widening the Choices Available

As has already been noted in the school profile, one of the more recent changes to the structure of the Transition year was the introduction of sampling of subjects to help the students to make a more informed choice about their options for Leaving Certificate. Perhaps the main advantage, from the students point of view, is the fact that not having studied a subject for the Junior Cycle does not necessarily limit the options open for Senior Cycle.

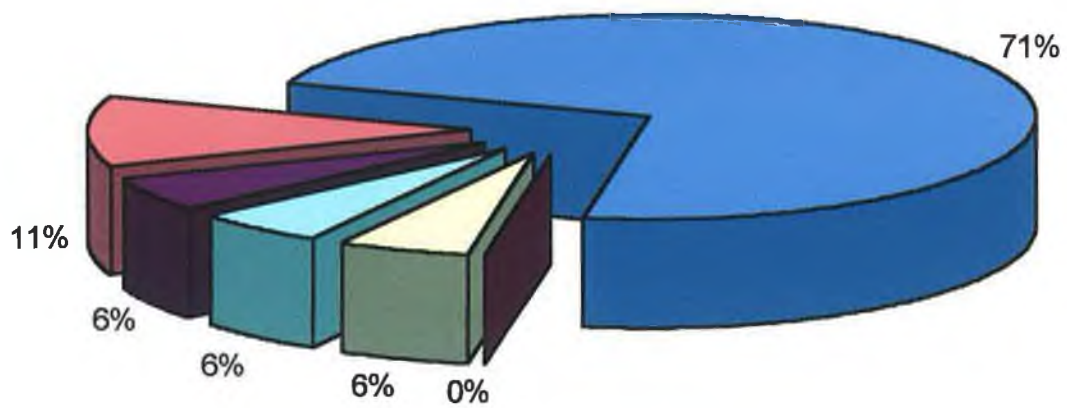
The core curriculum at Junior Cycle does not include Science or Business Studies and not having studied these two subjects could eliminate six Senior Cycle options, namely Biology, Chemistry, Physics, Accountancy, Business Organisation and Economics. This difficulty is overcome by offering the pupils the chance to try them out in Transition Year and the majority of students' avail of this opportunity.

#### The Sciences

Within Cohort 1 only a minority of students did not chose Science in the first place, i.e. less than 14%. During Transition Year practically all of these students did take up a Science subject, leaving only 1.5% of this cohort not having any experience of this discipline while in second level. Figure 4.11(a) shows the breakdown of that subgroup.

As one can see the vast majority of these students chose to sample Biology. In total 83% felt they would like to try this subject, only 6% opted to try Chemistry and 12% Physics. Thus even amongst the students that have no experience of Science there is a perception that Biology is the most accessible and easiest of the three.

**Figure 4.11(a)**  
**Science Subjects Chosen by Students that did Not Study Science for Junior Certificate**



■ Biology ■ Chemistry □ Physics □ Biology and Physics ■ Biology and Chemistry ■ No Science Subject

The image of Biology as an easier option was given as the reason for choosing this subject by one of the students, writing “easiest science subject” on the questionnaire, but she did not elaborate as to why she took up a science subject in the first place. Others mentioned the career advice they had received as the motivation for taking up a subject, “need a science for future career”. Another said that they picked Biology as it would “help with Home economics”, as well as future career. The majority of students were less focussed in their reasons, stating that it was ‘Human Biology’ they were interested in or they ‘wanted to learn more about the body’.

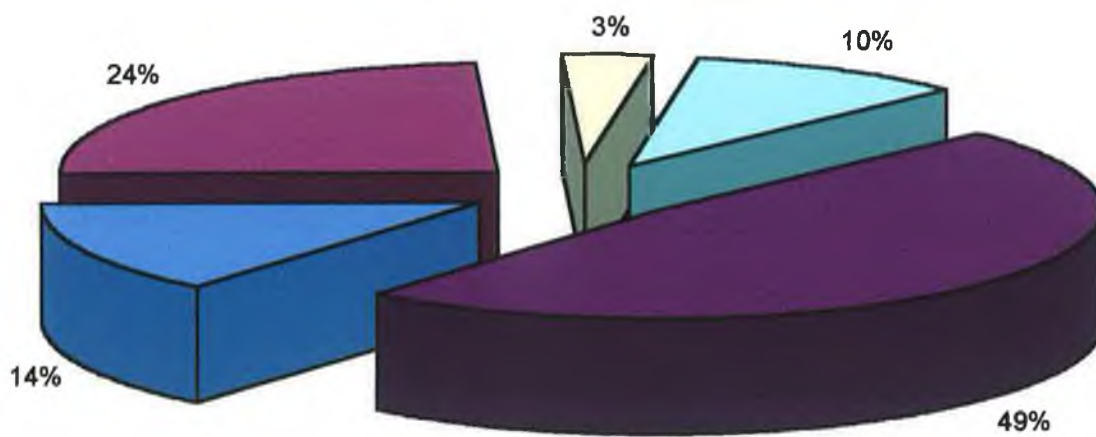
### **Business Subjects**

Far more students did not opt to study Business Studies in the junior Cycle, nearly 22%, and of this fifth of the cohort nearly half did not feel it would be of any help or advantage to sample a commerce subject. This translates as one in ten of the pupils in that year having no experience of any business subject. Figure 4.11(b) gives the breakdown of this subgroup. One quarter chose to sample Economics and 34% chose Business Organization. A very small minority, 3%, opted for Accountancy.

Again there are various reasons given by the students as to why they picked as they did. The students that took up Accounting had family connections that they felt would allow them to take up this subject and do well in it; these were, however, only a minority.

The rest of the group were evenly divided between those that were curious, interested and wanted to try out something new and those that were taking a business subject to keep their options open with regard to future career or because they were advised to do so.

**Figure 4.11(b)**  
**Business Subjects Taken up by Students that did not Study Business Studies for the Junior Certificate**



■ Economics	■ Business Organisation
□ Accountancy	□ Economics and Business Organisation
■ No Commerce Subject	

## **Home Economics**

Another subject that is not 'core' for the Junior Certificate and hence that could limit a subject at Senior Cycle is Home Economics. Nearly 35% of the cohort did not study this subject in the first three years and therefore, before sampling was introduced, could not have tried Home Economics, Social and Scientific, for the Leaving Certificate. Of this 35% approximately a quarter decided to study it in Transition Year, in other words 9% of the cohort picked this subject up. Once again the reasons for taking up this subject were varied but could be divided into three main elements. Those who chose it because it gives life skills that will be of benefit in the long run, those who chose it as they felt it was an easy option and those who wanted a subject to complement Biology.

## **Continuing with the New Subject**

Of those students that picked up a science or a business subject less than half of them continued with the subject to fifth year. The numbers were even less with Home Economics as only one in twelve of those that sampled continued with the subject. The comments from the students were not altogether negative, most were glad they had the chance to try the subject. Some placed the new subject as their fourth option should they not get their first three choices. Some did mention that picking it up placed them, they felt, at a disadvantage to those that had taken the subject for three years. Others simply did not like the subject.

For those that did continue with the subject, however, the opportunity to try it out was key to making that choice. To quote one of the students interviewed, when asked if sampling was worth while...

“Definitely, I would never have picked Economics if I had not done it in Fourth Year. I was totally anti-business but...” (O.A.)

This particular student said that she had planned to take Chemistry, History, German and French. At the end of Transition Year her choices were Biology, History, German and Economics.

The benefits of sampling for the student are therefore obvious. Not only does it allow students to try the different areas of a discipline such as Business Studies but also allows them to take subjects on for the first time without committing to the subject for the entire Senior Cycle. At the end of the year students are able to make a far more informed choice as to the subjects that will suit them and that they will enjoy.

### **Subjects Positively and Negatively Affected by Sampling**

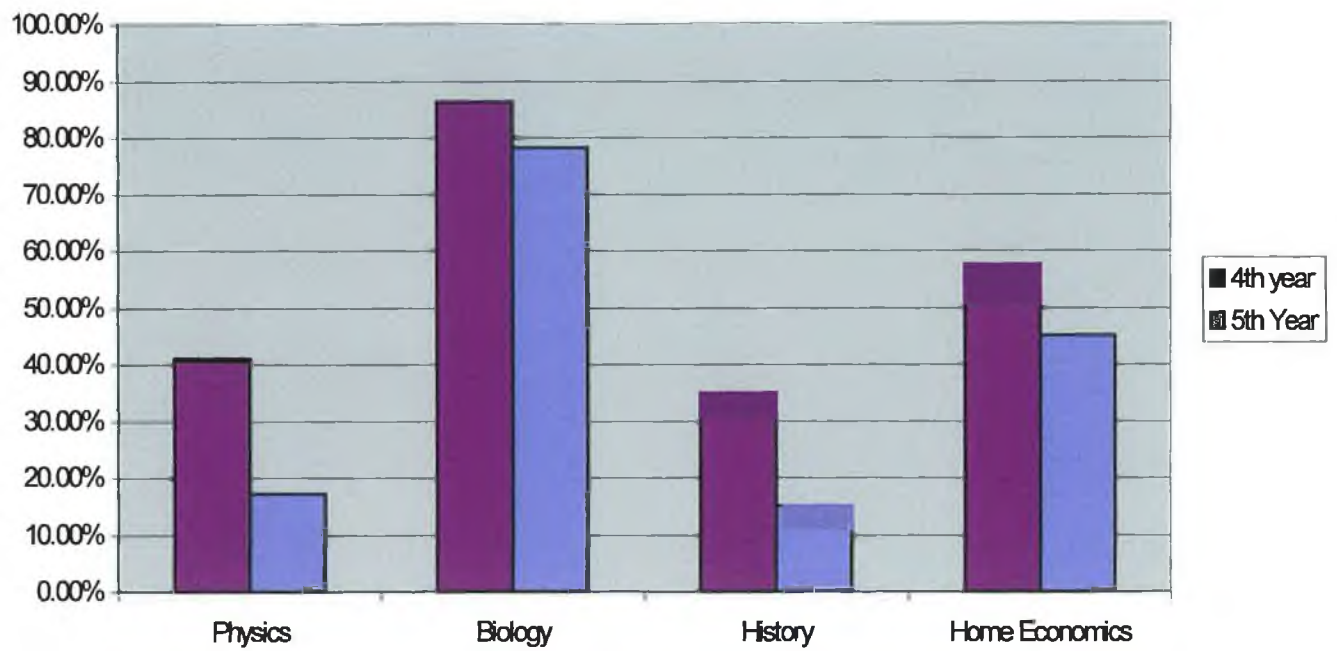
As already explained in the last section the idea of sampling is to give the students the opportunity in Transition Year to try out the various subjects and to then make an informed choice as to which they would like to continue with for the Leaving Certificate.

The students pick six subjects they are interested in for Transition Year and then four they would consider for the Leaving Certificate. For each subject one would expect to see a fall in the numbers from Fourth to Fifth as students refine their choices and some decide against subjects they tried out over the year.

Figure 4.12(a) shows the numbers wishing to try the four subjects we are focussing on in Transition Year and those willing to do the same subjects for their final two years. As one can see there is a drop in each subject but the most dramatic difference can be seen in Physics and in History where more than half of the students decide not to continue with these subjects. This would imply that these two subjects are negatively affected by sampling but the question remains as to how serious the students that sampled these subjects were about studying History and Physics for the Leaving Certificate examination.



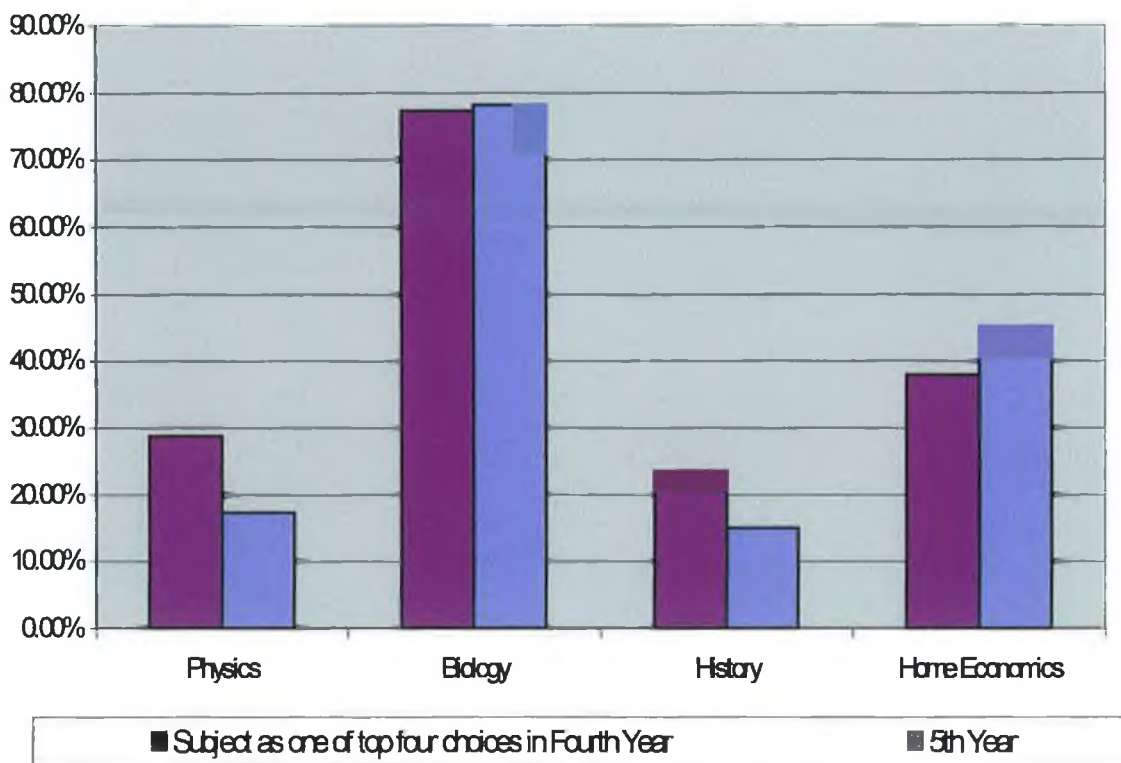
**Fig. 4.12(a)**  
**Cohort 1, Percentages Choosing Subjects For Senior Cycle**



## Changing Preferences

Some of the students, that changed their mind about the subjects, may not have chosen to do these subjects anyway, if they had been asked to pick their subjects in third year. If one looks at the numbers that put History and Physics as the first four, of the six subjects, to try in Transition Year and assume that they are the pupils that would, if asked at that stage for Leaving Certificate subjects, pick History and Physics the following picture emerges, Figure 4.12(b). The numbers that put Physics and History as their top choices at the start of Transition Year is significantly higher than the numbers that end up picking it as a Leaving Certificate subject at the end of the year.

**Figure 4.12 (b)**  
**Subjects as one of Top Four Choices in Transition Year and in Fifth Year**

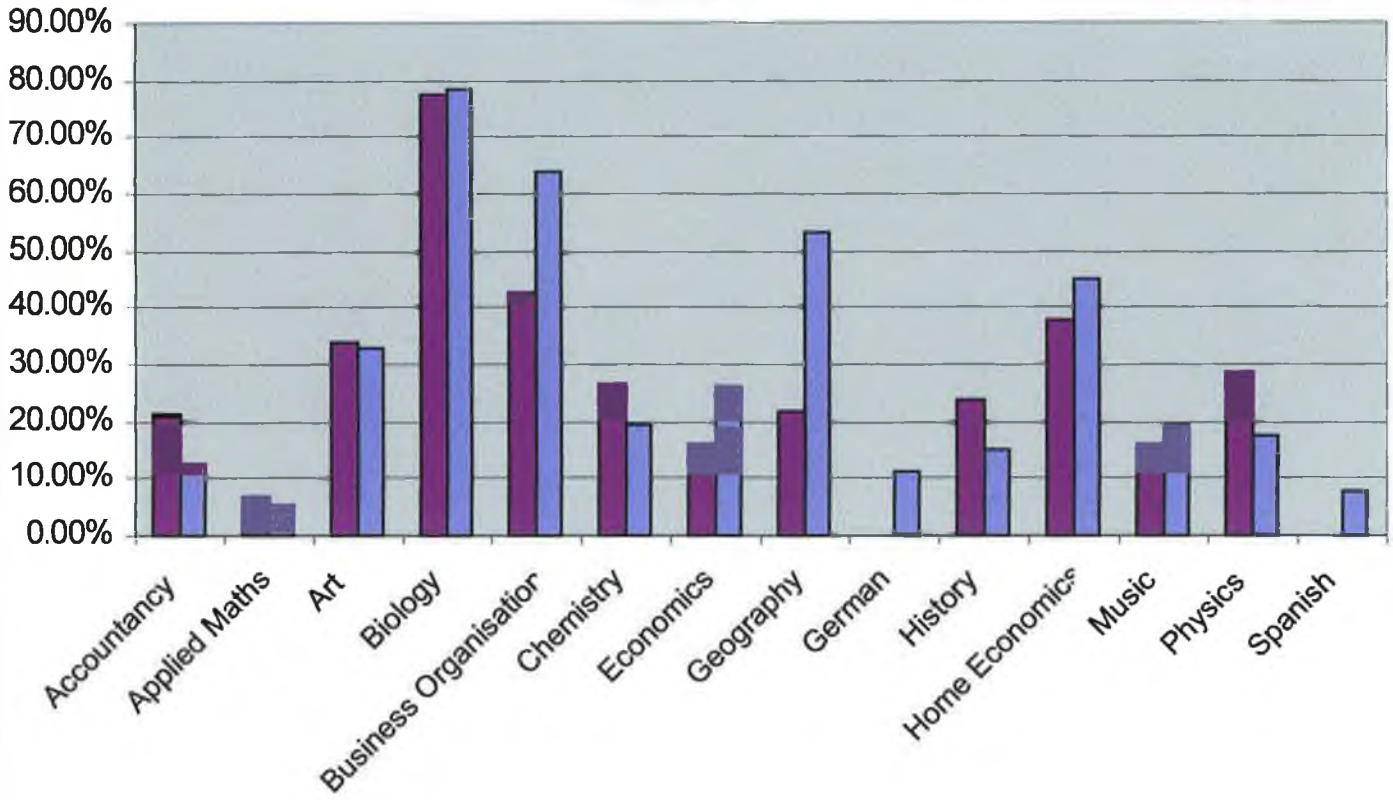
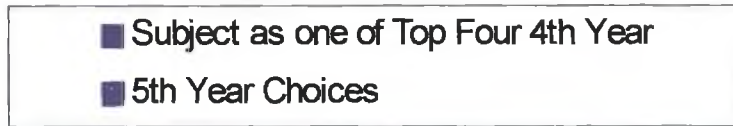


Conversely the numbers that put Biology and Home Economics as one of their top choices increased over the year in both subjects, more so in Home Economics. Therefore not only are fewer deciding to drop these subjects but also some that had it as a fifth or sixth choice at the start of the year have decided to continue with it.

The conclusion that can be drawn therefore is that during the year students are, as is the aim of sampling, deciding which subjects they prefer or find easier and are refining their choices but to the detriment of the numbers picking Physics and History.

Physics and History are not the only subjects that are failing in fourth year to retain the interest of the students. Most of the subjects that are generally minority subjects anyway are losing students over the course of the year (Figure 4.12(c)). This includes Accounting, Applied Mathematics and Chemistry. Subjects that are moving up from being fifth or sixth choice to one of the first four, in other words positively affected by sampling, are Geography, 22% at end of third year to 53% at end of Transition Year, Business Organisation, 42.4% to 64% and Economics 16% to 26%. (Note: these are not necessarily the percentages in each class for Fifth Year but the percentages that are happy to consider continuing with the subject)

Figure 4.12(c)



## Reasons for Changing Preferences

As to why they are changing their minds about the subjects it may be useful, at this stage, to look at the comments of those that chose to sample these two subjects and the remarks of the two emerging subgroups, those that continued with them and those that did not.

Cohort 1 were asked at the end of third year to list the subjects they wanted to sample in Transition year and the reasons why they wanted those particular subjects. At the end of the next academic year the same students filled in a second questionnaire in which they listed the subjects they were keeping on and the ones they were dropping. They were also asked to state why they had made these decisions.

There was a range of reasons why students did not continue with Physics. Some of the remarks were relatively neutral, implying that while the subject was O.K., and not disliked, others were easier or more interesting. This is to be expected as students try subjects they are not sure about and eliminate the ones that are least suitable. 40% of replies fell into this category. There were however a number of more dramatic changes of mind. For example one student had written that Physics was the “most interesting of the Sciences” but one year later felt it was “boring”. Also the student that wrote “love Science” who later decided Physics was “too difficult” and “... not interested in it”. Another student wanted two Science subjects for the Leaving Certificate and chose Physics and Chemistry and ended up dropping Physics, “too complicated”, and picking up Biology again for Fifth Year. Other remarks included comments like ‘too mathematical’ (8%), ‘others were easier’, ‘too difficult’, and ‘hard’ (13%) and, unfortunately, ‘not interesting’ and ‘boring’ (35%).

The same kind of extreme comments appeared for the students that initially wanted to study History and then changed over the course of transition Year. Some said they loved the subject, found it interesting, but that in other subjects it was easier to get points, for college places, or simply History was too much work.

Other students wrote that History was their “favorite subject” or they “wanted it for Leaving Certificate”, and even “want to do it in college”, only to decide at the end of the year that the course was too long, too difficult. This seemed to be considered the main problem with History, that it required too much work, it was too hard and too long a course.

Based on the returned questionnaires over 70% of the students that decided against History, as a Leaving Certificate subject, cited the above reasons. Only 8% said they found it “boring”.

There can be no doubt that the students value the chance to try out subjects and postpone making the choices to the end of Transition Year. It is also in keeping with the spirit of this year, making it more than the first year of a three-year Leaving Certificate course. It does however bring to light the fact that the students’ preconceived ideas, about the relative interest and ease of the various subjects, is being reinforced, not dispelled, by their experience of the subject in Fourth Year. Considering the numbers of students that are sampling these subjects is already small, and these students are not staying with the subjects, then perhaps there needs to be a review of the content of the courses, in Transition Year and perhaps the Leaving Certificate course itself, if these disciplines are to continue in Senior Cycle.

### Section 3

When the students were asked to fill out the questionnaires about the subjects they chose they were asked to comment on why they picked as they did. In this section I hope to look at their comments in more detail and try and extrapolate from these remarks, and from the subsequent interviews, the mindset of those picking the four different subjects we are focussing on.

#### **Physics and History Students**

Physics students, as a group, appeared to be a very focused and future orientated group. As already discussed in section 1 these students are from the two top bands in cohort 1 and are high achievers and self confident about their ability, based on the grades they achieved and the number of subjects they attempted at higher level for the Junior Certificate. The school itself prides itself on its academic tradition and expects the majority of the students to go on to further education after Leaving Certificate. Thus simply aspiring to third level is not a good indicator of the level of ambition of the student, almost all of the students surveyed planned to pursue further education, however the type of career aspired to may be a better pointer.

#### **Career Aspirations**

With the Physics class the main interests were in Medicine, Business, Architecture, Law, Pilot, Engineering and Sciences courses of various types. All the students that put down the vague term "Business" and Law had chosen only one science subject i.e. Physics, and some stated that as their reason for picking the subject, "I wanted one science subject". The rest of the options for the future, which these students were looking at, are ones require Physics or where having studied the subject would be an advantage. This is exactly the reason given by the students themselves. Over half of these students choosing Physics, in cohort 1, cited career, third level requirements and the future benefits of taking this subject as one of their reasons.

Similarly with cohort 2 nearly half the corresponding group mentioned future needs as the motivation behind their choice.

The type of career cohort 2 had in mind also ranged from the vague "Science based course" to the more specific "Pilot" or "Medicine". This is not to say that the same students do not 'like' the subject. Reasons given also included the words like, enjoy, interest and the fact that some found it "easy" and felt they could "do well in it", this was however a smaller minority, but the primary motivation was future career.

Of those that sampled it in Transition Year and then did not continue with the subject there are some equally high profile careers aspired to but a minority that would benefit from the individual having studied Physics. (18% of this group do wish to pursue a 'science' based career, Medicine or Pharmacy was mentioned, but of this subgroup three-quarters chose to study Chemistry and Biology and dropped Physics). The main aspirations among this group are, Law, Computers, Media Studies and, that nebulous term, Business. Within this group there was also four times the number of students that entered "don't know", when asked for the career they would like, compared with those that continued with Physics.

When this is compared to the type and nature of the comments and reasons given by those choosing the other high profile subject, History, the difference is clear. In cohort two over half the students cited personal preference as the main reason, 35% using the phrase "love the subject" as their reason. In this group a minority stated that 'career' had an influence. Among these reasons were the possibility of a career in Law, Journalism or simply a wish to continue with this subject at third level.

The first two of these, along with Teaching; Primary and Secondary, were the most common career hopes for the group as a whole but there was also the same number again of "don't knows". Therefore in the group that sampled the subject there was a huge diversity of aspirations and no clear pattern.

This would seem to imply a difference in the two groups choosing the two high profile subjects. Those picking Physics are clearer about the careers they want and are focussing on the subjects that will help them in this. They are placing 'career' above 'like' in the reasons why they are picking as they do.



The group choosing History are also high achieving students, based on the grades they achieved in Junior Certificate and the number of subjects done at higher level.

They are picking the subject not so much because it will help them in a future career, for few of the careers they mention directly benefit from having studied the subject, but because they 'like' or even 'love' the subject.

### **Focus on Science**

Another indicator of the career focus, and the aspirations, of the Physics and History students are the numbers that are taking more than just that one science subject. To take two science-subjects, out of the three choices that are available to them as a student, would indicate that they were very sure and determined in the career they are aspiring to. Choosing two sciences automatically eliminates entire disciplines, the arts and humanities, the practical subjects or the business subjects lose out and those avenues of study closed.

Over 64% of the Physics class chose to do this by picking two sciences. The second science choice was almost equally split between Chemistry and Biology, with Chemistry slightly ahead. Of those choosing to do two sciences over half put a business subject with their sciences. The others picked a variety of subjects, such as Art, History, Music and even Applied Maths (giving that student, for all intents and purposes, three Sciences).

Chemistry is also a subject that would be regarded by the students as difficult and challenging and shows the same profile of students as Physics does. With this subject an even higher percentage of students, from cohort 1, that chose it also picked a second science-subject also. Three quarters of the Chemistry students were taking a second science with slightly more picking Biology compared to Physics.

When high percentages for these two groups are compared to the numbers doing two sciences from those that picked Biology, there is a marked difference. Only 18.6% of those choosing Biology are also taking another science subject. (Of these almost twice as many picked Chemistry as picked Physics, which correlates with the above findings)

Again what is implied by these choices is that those picking Physics, and by inference Chemistry, are determined and fixed, and very much future focussed, in deciding to narrow their choices to such an extent at this stage in their education.

### **Interviews with Physics and History Students**

Three students were chosen at random from those that had picked Physics and were interviewed to try to further develop the emerging picture and underlying reasons why this subject had been picked. The three students, who are identified as K.B, D.R. and C.L., were asked firstly why they chose Physics. Two of the three wanted to study Architecture and had picked Physics as they had heard it would “help me in my first year in college”. These two had only picked one science subject, namely Physics, and K.B. had taken this subject despite not studying science for the Junior Certificate.

The third student, C.L., when asked what career she was aiming for stated “Anything to do with Science...” and to this end had chosen to study two sciences for Leaving Certificate. The reason why C.L. decided to study Biology as the second of these was for points, “someone said it would be easy enough to get points in Biology”. Here again we can see the long-term aim as primary motivation.

All three stated that career was the main motivation behind their choice of this subject. This supports the idea, developed from looking at the comments on the questionnaire, that these students are more focussed on future benefits than current ease or preferences. This is not to say that they disliked the subject. When pressed further they all said that they had tried the subject and liked it but that was not the primary reason given for picking it.

The second subject from which students were selected for interview was History. As discussed above there were obvious differences between the subjects when the reasons for choosing each of them were examined. The reasons given in interviews also echo the comments on the questionnaires. All three interviewees, L.B., P.M. and O.A., stated that the reason they picked History was because they ‘loved’, ‘liked’ and ‘were really interested in’ the subject.

Two out of the three said that they decided to go with History, despite ‘warnings’ from friends, because they so enjoyed the subject.

“I wasn’t going to pick it because everyone says it is really long and hard to learn...but I decided to pick it because I really like it...” (P.M.)

“I am really interested in History although I have heard that it is really dense and there is so much information and a hard exam... but I thought it was worth doing History as I liked it.” (L.B.)

None of the three interviewed had a clear idea about what career they wanted. This is not to say they were not ambitious, they wanted to do well in school and achieve high points in the Leaving Certificate, they just were not definite about the type of course or discipline they wished to pursue after school.

All three had picked one science, and two out of the three had a business subject. The students are advised in careers class that if they are not decided on a definite path for the future to pick subjects that allow them to keep their options open and to give a well-rounded education as a base for future study. The other subjects these students picked were chosen for this purpose, for example L.B. chose Physics and Economics so as “to have one science and one business subject”.

For O.A. the added desire to gain high points led to her picking Biology, “I was sure in terms of points” and Economics, “I heard it was a good points subject”. (This student had taken up Economics despite not having studied Business Studies in Junior Cycle).

They saw History as a neutral subject, not designed for any one area or career.

“... It is a good base and gives you a lot of knowledge and general education about the world as it was and as it will be.” (L.B.)

So what we have here, with History students, is the same initial profile as with Physics students, top band, majority of subjects at higher level and top grades in Junior Certificate. Where the difference lies is in the clarity of focus, for future courses and careers, between the two groups.

Those taking History, while ambitious and motivated, are not fixed on a definite career and hence are picking to keep options open, maximize points for the same end and because they like the subject.

### **Academic Self-image**

As already looked at in section 1 the students that chose Physics and History are generally the students from the top bands, who attempted ten higher level papers at Junior Certificate and, by and large, succeeded in getting an honour on these papers. This would indicate that these students have a high academic self-image but it is difficult to gauge such an abstract concept. In an effort to do so the students were asked in the interview to comment on their own ability, to assess where they are in relation to others in their year. They were also asked how well able are they for the work set by the teachers and finally how ambitious are they. As might be expected from teenage girls they were reluctant to give themselves a glowing report, for fear of being seen as conceited, but when pushed they had overall quite a positive academic self-image.

All of the students interviewed were positive about school in general. Aware of the fact that the interviewer was a member of staff they were given every chance to couch their replies in negative terms if they so wished. Instead they all, bar one, replied positively, albeit with certain provisos; some were not all that keen on “getting up early” and that “like everyone I look forward to a day off”. Generally the response was more positive than expected by the interviewer.

When asked as to where they would place themselves in relation to others in the class they were again positive about their position. Out of the six students, of History and Physics, only one student placed themselves in the bottom half of the class because “everyone did so well in the Junior Certificate”.

This student was the one noted above that was the least positive towards school but, having said that, her remarks were not overly negative,

“...I like school well enough, I don’t like coming every day but I like it well enough, more then other people” (P.M.)

From among the three Physics students one, K.B., felt that she was “average to good, managing fine”, and ranked herself in the middle of her class. The other four students placed themselves towards the top of their class, “top ten percent”, “top twenty percent” or “near the top”.

With regard to ability and ambition again they were overall very positive, the most vocal being O.A.

“I want to do well. I have always wanted to do well. Some people come out with a C, and it may be good for them, this sounds condescending, but if I get C’s I hate it. I want to be up there, I want above 500 points in the Leaving” (O.A.)

Overall the students remarks back up the emerging picture of high achievers and ambitious girls picking the high profile subjects and this has an effect of perpetuating and continuing the image of the subjects as such.

### **Home Economics and Biology Students**

The previous two subjects looked at are minority subjects, only a small number of students chose to study History and Physics each year. The two subjects now being looked at are far more popular choices. Both within the school and nationally Biology is the most popular science option and amongst female secondary school students Home Economics is chosen by 53% nationally and 34% in St. Catherine’s.

What would therefore be expected, with the larger numbers, is a far greater representation from across the bands and a greater spread of grades attained in Junior Certificate. This was looked at in greater detail earlier in this chapter and it was found that the Biology class did have a more balanced composition but Home Economics class had an over-representation from the academically less able students.

In this section, as already stated, the reasons given by those students as to why the picked these two subjects will be looked at to see if there are noticeable differences in the motivation behind choosing these subjects compared to each other and to the previous two, high-profile, subjects.

### **Biology Students' Motivation**

As already stated students are advised to take at least one science-subject if they are not yet decided on a future career path. This will keep options open to them should they later decide to pursue a career in the science or medical areas.

When stating their reasons for picking Biology nearly 40% of the students replied that this was one of the factors influencing their choice. The phrases used were simply that "one science was recommended" or that they were "told to take one science" to the more oblique "best of the three sciences", which suggests that none were liked but one was picked for the above reason.

One student went even further with the statement, "I don't really like this subject but I felt it would be best to have a science subject."

Matching this as an influencing factor was "interest" or "find this subject interesting" with 38% mentioning these words in some form. "Like" and "enjoy" were also used by one fifth of the students and "easy" or "easiest" by 13%. Obviously there were combinations given when more than one factor played a part in the students decision, for example "It's meant to be the easy section in science and we were told you should do a science subject."

One contrast between the reasons given by these students and those that picked History was that, the words used to express personal preference were far more neutral. As mentioned above with cohort two 35% of those choosing History stated that they "loved the subject". Others said that it was their "favourite subject" or that they wished to continue with this subject to third level. Not one reply from the Biology students mentioned the words favourite subject or 'loving' the subject. Instead the words, mentioned above were far more neutral, "I like this subject" or "I find it interesting".

## **Career Aspirations**

The most obvious difference between the replies from the Biology students and from the Physics students was the ranking of 'career' as a deciding factor. Only 10% of replies mentioned future career as the reason why they chose to study Biology.

This is reflected in the list of careers that are mentioned by those picking Biology. The list is extensive, covering many different areas, varying from high profile aspirations, such as law and medicine, to less prestigious careers, such as secretary or beautician/make up artist. Teaching, primary and secondary, was mentioned as a hoped for career by 11% of the students. Quite a sizeable number put down "Don't know" when asked what they would like to pursue after school.

The group also contains those that are doing two sciences, discussed above, and also those that are doing two business-subjects. Both of these groups could be expected to be more focussed and future orientated however they only make up 27% of the total. Another 27% have not chosen any business subject at all, and only the one science. Nearly half are choosing a combination that will keep all their options open, i.e. one science, one business and one other subject.

What these findings seem to suggest is that biology is chosen for their 'recommended' science subject as the path of least resistance. They neither love nor hate the subject, it is interesting, helps with Home Economics (discussed elsewhere), appears the easiest of the sciences or is simply the least disliked of the remaining choices available to them.

## **Home Economics Students**

The composition of the Home Economics class is a very mixed one. There are students that achieved five or more A-grades in the Junior Certificate along side students that only passed, didn't get an honour on any higher level paper in the same examination. There is however, as already discussed, an belief abroad that Home Economics is a relatively easy subject and due to this fact perhaps there is an under-representation of the top band both before and after the Junior Cycle in the subject.

Interestingly no student mentioned the fact that they perceived the subject as easy when giving their reasons for choosing it. Most of the reasons given were personal preference, students were “interested in”, and “liked”, “enjoyed” and even “loved” the subject.

The tone of the comments was, in general, far more positive than those used to express personal preference in the Biology group. Career was also mentioned by 11%, e.g. “if I go into child care this is a good subject”, the same percentage mentioned what could be termed as life-skills. Again for most students there was more than one reason why they decided to study this subject, “interesting and useful after school” or “it’s my favourite subject and I feel I will do well in it”.

As with Biology there was a range of career options being considered by the students but here there was a higher percentage, 23%, of “Don’t knows”. Very few of these students, 7.5%, had chosen to study the more focussed and narrow combinations of two sciences or two business-subjects with Home Economics. One third of the students had chosen one science and one business to go with Home Economics (all, bar one, had picked Biology in this subgroup), and, as said earlier, this would indicate students that are unsure about what they would like to pursue after school.

Another 23% had not taken a business-subject and this entire group had chosen Biology as their science-subject. (Of the 27% that had no science, and one business, all had chosen Business Organisation) This link with Biology may be due to the fact that the two subjects are seen as complimentary, “it’s a bit like Biology for the Leaving Cert.”, and this has already been discussed. It may also be due to the fact that, with nearly 60% of these students also studying Biology, they are a subgroup showing the same characteristics as Biology students, that we looked at in the last section.



## **Interviews With Biology and Home Economics Students.**

### **Biology Students**

The interviews with the six students chosen at random from the Biology and Home Economics class reflected the general findings that were discussed above. Once again the perceived link between Biology and Home Economics was evident from the comments these students made.

Four out of the six had picked to study both of these subjects; two specifically mentioned this link...

“Home Economics would help with Biology that’s why I picked it’ (R.M.), and “It (Biology) links up with Home Economics and I need a Science Subject” (H.G).

Both of these students were actually being interviewed to ascertain why they chose Biology and the above coupled with “It is an interesting subject” summed up their reasons.

This supports earlier conclusions as neither student was particularly enthusiastic about the subject but felt there were benefits to picking the subject, and they could manage it adequately.

The third student that was interviewed about Biology, S.F., had different motivation. She was far more positive about the subject, “I always really liked Biology...” and having chosen two sciences, Chemistry being the second, was as expected more enthusiastic about the discipline in general. The type of career that this particular student was aiming towards also echoed the ambitions of the Physics students that had chosen two sciences. Initially using the general terms of ‘the sciences’ she then discussed specific colleges and courses, namely Radiography and Pharmacy, two ‘high profile’ careers.

The careers being considered by the other two ‘Biology’ students were Social Studies or Childcare and some type of Post Leaving Certificate (PLC) course.

### **Academic Self-Image**

With regard to the academic self-image of the students the three students showed the range that one expects with Biology. One student, S.F., said that she would place herself “near the top...not in the top ten percent but near there” while the second of the three, R.M., placed herself “in the middle. Average I would say...”. The third student had, of all the interviewees, the lowest academic confidence. This student was the most difficult to interview and to try and elicit information from. Initially the majority of the answers were yes/no responses and when asked about herself as a student she had to be reassured to allay anxiety.

While being generally positive about school, “Oh I like school, all my friends.... I like school”, with regard to subjects H.G. responded “I don’t find it easy... but I try, I try hard... ”.

Thus with Biology there is the entire spectrum of abilities, ambitions and motivations that one would expect from a subject that as discussed earlier reflects the composition of the entire cohort.

### **Home Economics Students**

Two of the three students that had chosen Home economics picked it predominately because they liked the subject. Their remarks were very positive and enthusiastic.

“I really liked it for the Junior Cert. and ...in fourth year... favourite subject”  
(L.D.)

“I love Home Economics, it is my absolutely favourite subject” (S.F.)

The third student picked it because it was easier than other options and hence good for points. This student was aiming to keep all her options for the future open by maximising points and doing one business-subject and one science, Biology.

All three students saw themselves as average ability or in the ‘middle’. This is interesting because the three students were of three different ability levels. One had attempted 7 higher level papers and achieved 4 C grades, the second that attempted 9 higher level papers and achieved 9 C grades and the third had attempted 10 higher level papers and achieved 5 B grades and 5 A grades! Yet all three saw themselves as average ability.

The students with the best grades, as good as could be asked of any student, reckoned herself to be “not very bright... I just try and do my best”.

One of the three felt that she was considering sociology as a career after school.

“When I leave school I will do sociology or some thing... It was originally Home Economics teacher but I think now I have developed on to social work and things.” (S.F.)

With the other two there was no mention of careers they might like to pursue or ambitions for the future.

It is very difficult to generalise from such a small sample but coupled with the more general findings, from the remarks of Home Economics students on the questionnaires, there are certain patterns. Namely they are more enthusiastic about the actual subject than those picking Biology. Generally these students also have a lower academic self-image, despite the reality of their ability.

## CONCLUSION

The choices that students make in school can have a long-term impact on their future careers and opportunities. These choices are not made in a vacuum; they are made by students who, as members of a wider society, are affected by the values and expectations of that society, this was looked at in detail in Chapter 1. Arriving in second level school at the age of twelve or thirteen they may have already established an academic self-image, based on their experiences in primary school and on expectations placed on them by family and friends. At this early stage they are asked to choose subjects for Junior Cycle that may impact on the choices that are open to them further down the line.

The subjects chosen by the student on entry into post primary school have significance beyond the Junior Cycle. They determine to a large extent, a student's options in Senior Cycle. (NCCA, 1999, p. xiv)

### **Who and What ...**

What is evident from this study is that it is the students in the academically weaker classes that chose not to study subjects like Science at Junior Cycle in favour of a more practical subject, like Home Economics. The students in the top streams or bands tend to focus on the more academic subjects.

While, as stated above, the student's academic self-image, and the preconceptions that exist about certain subjects, may have been established before they even enter the school, the reality of banding and the students subsequent experiences can alter or concrete these images.

... the system can both reinforce, and even make worse, a problem that is already there, and the most recent evidence indicates that it can intervene effectively in children's lives to reduce or increase their levels of educational achievement, and consequently substantially affect their life chances. (Coolahan, J., 1994, p.106)

In an attempt to counteract the possible negative effects of banding on the students the school in this study ensures that all the students, regardless of the Junior Cycle class are offered all the subjects and are facilitated to study all the subjects at higher level. This is in line with Smyth's findings on effective schools. (Smyth, 1999) The majority of the students study five or more of their subjects at higher level (88%). This perhaps explains the confidence that students feel, by the time they reach Transition Year. Nearly all of those that had not opted for Science, up to this point, sample a Science subject and half of this group continues with that subject. However the image of Biology as being the most accessible of the Sciences persists, reflected in the numbers choosing it.

### **Transition Year**

During Transition Year the students have the chance to try out subject they did not do before and hence to broaden their educational experience. They now also have the experience of the Junior Certificate examination, and the knowledge of how they performed in certain subjects to help them to choose Senior Cycle subjects.

Sampling the subjects in Transition Year did make a difference to the subjects the students picked. As already discussed many felt enabled to take up a subject in a discipline that they had not previously studied. The NCCA Report in 1999 found that students that participated in Transition Year were more likely to take up a subject *ab initio*. All were very positive about the benefits they felt they had gained from being able to avail of the chance to try subjects out before deciding.

The same pattern, which existed at Junior Cycle, emerges once again however, when the composition of the Senior Cycle classes is analysed. The students from the lower bands in Junior Cycle are concentrated in certain subjects while the academic high achievers, or at least those with a more positive academic self-image, dominate in others. This polarisation can result regardless of the students' performance in the subject in their first state examination.

The subjects where this imbalance occurs are labeled in this study as the high profile/status subjects and low profile/status subjects but it is not clear as to what makes them so. For example, in this study it was found that students achieved better grades in History than in Home Economics in the Junior Certificate and yet the students themselves regard History as a 'hard' subject. The image of the subject, once established, is not altered by actual success in the subject.

The question arises as to whether the subject is taken by academically able students because it is high status subject or is it a high status subject because it is taken by these students? In other words, if the image a subject projects is based on the students who chose it then a self-fulfilling prophecy is created, whereby the subjects chosen by the more academically able are seen to be subjects for the more academically able. The result is that smaller, more elite, classes are created which perpetuates the image.

### **Subject Content**

This does not mean that the content of the subjects themselves has no influence. The image problem, if it is to be tackled, will only change if the students regard the content of the subjects as more accessible to them. There is a case for a reexamination of certain subjects like History, to see why students that do well in this subjects in Junior Certificate and enjoy the subject, offering very positive comments before Transition Year, decide not to continue with the subject. What could also be looked at are ways and means of making the subject more relevant to the students lives.

There are three possible areas that could be considered, with regard to content of the subjects in Transition Year.

Firstly the link between Biology and Home Economics, seen as complementary subjects, seems to have a positive effect on the numbers taking these subjects. Perhaps similar cross-curricular links could be established and promoted to encourage students to consider the less popular subjects. It is not enough to blame the image the subject has as the reason so few pick it, without looking at what could, and should, be done to open the subject up to other students with more varying abilities and characteristics.

Another consideration is to ensure the course, at Transition Year, is a true reflection of both the Leaving Certificate course and the ideals of Transition Year. There is a danger that there is too much of a focus on the academic, and not enough on the practical side, in subjects that would benefit from more practical work, such as Physics. With a subject like History one could consider if the content builds on the knowledge the students have from Junior Certificate or if there is a focus on new material that causes students to shy away for the subject.

Are the subjects made relevant to the experiences and lives of the students or simply promoted as subjects that will only benefit the enthusiast or the students who may need it for further study.

The other possibility is that the subjects that are increasing in popularity, over the course of Transition Year, are ones where the practical work and other aspects that the students find the most enjoyable are promoted. The content is therefore not reflecting the more difficult aspects of the Leaving Certificate course. This omission can lead to difficulties down the road for the student.

To reiterate what was said above, those designing the modules for Transition Year should consider what elements of the course result in students being turned off these subjects while at the same time ensuring the content is a true reflection of the Leaving Certificate course.

### **... And Why**

As well as the academic profile, the personal characteristics of the students choosing various subjects differs, not just between high and low profile subjects but between the high profile subjects themselves. The academic focus, the career expectations, the attitude to the subject itself and the motivation of the students were noticeably different in the different subjects. When the influences that affected their choices were examined the majority of the students placed interest and career as the main reasons for choosing as they did.

The presence or absence of friends in the class did not appear to influence subject choice. This was perhaps to do with the fact that as the school was single sex, therefore the subjects chosen would not deny the student access to their peers.

The findings have also suggested that the students choosing the high profile subjects for Senior Cycle will come from the same Junior Cycle band, so regardless of their choice students will, more than likely, end up with their Junior Cycle classmates.

Having said that, the findings have shown that the students in these classes are more career orientated and future-focussed than their contemporaries and hence less likely to be influenced by the short term benefits of being 'with a friend'.

All the students attend careers classes as part of the curriculum and are given a lot of advice in this regard, with a particular focus, in Transition Year, on work experience in the relevant areas. Interestingly, the students did not feel that advice they had received had had an influence on them. At the same time those who had a definite career in mind were conscious of the subjects they would need and rated this as the main influence.

Those who were unsure about a future career had followed the advice, of choosing one science and one business subject, which had been given to them by the Careers Department. This would suggest that the students have been influenced by attending the classes but have internalised and incorporated that advice so as not to see it as an external factor.

None of the students felt that the teacher they may get for the Senior Cycle had any influence on them when they were choosing their subjects. This is perhaps a feature of the relatively positive pupil-teacher relations experienced by female students. (Smyth, 1999; Breen, 1986) The students being interviewed were all also very positive in their comments about school in general and all, bar one, had a relatively positive academic self-image. This is perhaps a product of the middle class social background and the high expectations placed on the students by teachers and parents. Having said this there was a differentiation with those choosing the high profile subjects being far more positive about their ability.



Issues that the school needs to address are concerning the hidden curriculum and the messages and values that it transmits to the students. There is a need to review presentation of subjects and their course content in order to make them more accessible. Another aspect for consideration is trying to find ways and means of facilitating students in areas such as Woodwork or Technical Drawing, but as has been mentioned previously this is not always feasible or practical.

However this study found that, overall, the school is an effective school, offering a wide range of subjects at all levels and to all students. Most of the students achieve above the national average in examinations (66%). The majority of students themselves come from backgrounds that promote educational achievement. However the students continue to make conservative choices with regard to the subjects they pick at Senior Cycle. Perhaps society needs to change further before students reflect, through the choices they make, true equality of outcome.

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# **APPENDICES**

## **ORDER OF CONTENTS:**

- 1: QUESTIONNAIRE GIVEN TO COHORT 1 MAY 2000**
- 2: QUESTIONNAIRE GIVEN TO COHORT 2 MAY 2000**
- 3: QUESTIONNAIRE GIVEN TO COHORT 1 MAY 2001**
- 4: LIST OF QUESTIONS FOR SEMI-STRUCTURED INTERVIEWS**

**Confidential**

Name: \_\_\_\_\_

Class: \_\_\_\_\_

Could you please indicate the courses and /or careers you would like to pursue after you leave school. \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Please list the subjects, and the level, you are doing for the Junior Cert.

Subject	Level
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	

## Confidential

Name: \_\_\_\_\_

Please state the career/area you would like to go into after school.

\_\_\_\_\_

Please list the 'choice' subjects you picked for Leaving Certificate. Indicate if you did the equivalent subject at Junior Certificate and/or sampled it in Fourth year, by ticking the box if you did.

Subjects chosen for fifth year	Subject Taken for Junior Cert.	Level taken (A/B/C)	Sampled in fourth year
1			
2			
3			
4			

In the Case of each subject briefly indicate why you chose that subject.

Subject	Reason

In the case of the other subjects you sampled in fourth year please list them and the reason you did not continue with them.

Subject	Reason

Thank you for your co-operation in completing this, have a nice summer.



## Confidential

Name: \_\_\_\_\_

Please state the career/ area you would like to go into after school:

\_\_\_\_\_

Please list the choice subjects you picked for the Leaving certificate.  
Indicate if you did the equivalent subject at Junior certificate  
and /or sampled it in Fourth year, by ticking the box if you did.

Subjects chosen for fifth year	Subject taken for Junior Cert.	Level taken (A,B or C)	Sampled in Fourth Year ( Yes/No)
1			
2			
3			
4			

In the case of each subject briefly indicate why you chose that subject.

Subject	Reason

In the case of the other subjects you sampled in Fourth year please list them and the reason you did not continue with them.

Subject	Reason

Are you the eldest in your family, or an only child?

\_\_\_\_\_

If not what position do you occupy, 2<sup>nd</sup>, 3<sup>rd</sup> etc.?

\_\_\_\_\_

What area of study are your older brothers and sisters engaged in?

\_\_\_\_\_

When choosing your subjects for the Leaving Certificate what influenced you?

Rank the following in order 1 to 5, (1 being the most influential factor and 5 the least influential factor)

Advice from Parents and/or older brothers or sisters.	
Interest in the subject.	
Easy, useful for points.	
Friends were doing it.	
The teacher I might get.	
Other factors... Please state factor	

Thank you for your co-operation in filling this out, hope you have a nice summer.

## Interviews

Explain to the student the purpose of this interview and reassure them answering any queries they may have.

State the subject that is the main focus of the interview and confirm the students is taking that subject for Leaving Certificate.

1. Why have you chosen that particular subject to study for the Leaving Certificate?  
Expand on the answers given.
2. Are there any other factors that influenced your choice?  
Suggest other possible factors if there are none forthcoming.  
e.g. Family, Friends, Teachers, How easy the Subject may be etc.
3. What are the other subjects that you are taking for Senior Cycle?
4. Once again could you expand on the reasons you chose these subjects?

### Academic Self Image

5. How do you see yourself as a student?  
Suggest some phrases that might apply  
e.g Hard working, Well able, Average etc.
6. Where in the class would you rank yourself with regard to ability?  
Again suggest some phrases  
e.g In the top ten percent, near the top, in the middle etc.
7. What is your attitude towards school?  
... Do you like school, is it O.K./ fine, do you look forward to leaving school etc.
8. What Future Careers do you imagine you would be interested in?  
(If future career was not discussed as an influence on subject choice)
9. Do you think that sampling in Transition Year was a benefit to you in making your subject choices?
10. What Subjects did you sample and not continue with and why did you decide against these subjects?

The order of the questions may vary according to the flow of the conversation.  
Thank the student, conclude the interview.