

The STC course as an alternative preparation for tertiary education

Mainstream academic Year 12 courses are the traditional pathway chosen by Australian secondary school students wishing to proceed to higher education. Alternative Year 12 courses tend to be terminal, so their graduates are denied access to higher education. A notable exception to this general rule is the Schools Year 12 and Tertiary Entrance Certificate (STC) course, which in 1988 was taken by 3200 students in 117 schools in Victoria as an alternative to the mainstream academic Group 1 course. The STC course is characterised by a school-based, negotiated curriculum, cooperative non-graded assessment and a descriptive report, whereas the Group 1 course has an externally prescribed syllabus, an external examination component, and an aggregate score. Typically, a cohort of STC students would contain more students from non-English-speaking and from working class backgrounds than a cohort of Group 1 students.

Since the inception of the STC course in 1976, those responsible for its implementation have ensured that their students would have access to a wide range of tertiary institutions, and in 1988 STC students gained acceptance to courses in every university and college of advanced education in Victoria as well as in many TAFE institutions, where they undertook studies in a range of areas, such as humanities, science, education, business studies, the arts, and nursing. How do these students, who have had a Year 12 experience that is very different from the usual traditional academic experience, cope with the demands of tertiary education? A study undertaken at the Australian Council for Educational Research (Batten, 1989) provides some answers to this question.

The participants in the study were Year 12 students from 14 schools who were enrolled in either the STC course or the traditional Group 1 course. Students' perceptions of themselves and their courses were monitored through questionnaires and interviews as they proceeded through the year, and again one year after they had left school. At the end of Year 12 it was found that, compared with Group 1 students, STC students had more positive attitudes to school, showed a significant increase in self-esteem and felt that their course was more relevant to their future needs.

Usefulness of Year 12 course to school leavers

One year after leaving school, students were sent another questionnaire; they were asked to give details of their work and study activities during the year and to comment on the relevance of their Year 12 course to their current lives. Only a small percentage of the respondents were unemployed (2.8 per cent of Group 1 students and 4.9 per cent of STC students); 36 per cent of Group 1 students and 56 per cent of STC students were in full-time employment, and 52 per cent of Group 1 students and 27 per cent of STC students were full-time students in tertiary institutions. The most common tertiary choice for both Group 1 and STC students was a college of advanced education; after that came universities for Group 1 students and TAFE institutions for STC students.

Data on respondents' perceptions of their current work and study lives were obtained from two sections of the questionnaire, one structured and one open-ended. The structured measure was prefaced by the question 'How well did your Year 12 course prepare you for your life this year by developing the following skills, knowledge and attitudes?', followed by 32 statements with a four-point response scale beside each item, ranging from 'Very well' to 'Not at all well'. The items clustered into two scales, one focusing on academic development (for example, 'encourage you to read widely', 'develop problem-solving skills') and the other on personal, social and career development (for example, 'encourage you to be independent', 'develop your self-confidence', 'prepare you for your future career').

Because of the different trends in the post-school destinations of Group 1 and STC students, a preliminary analysis of the data was undertaken within the two groups to see whether there was any difference in the attitudes of respondents in full-time work and those in full-time study. Using a one-way analysis of variance, no significant differences emerged between workers and students in either group in their estimations of the value of the academic and personal/social/career development components of their Year 12 courses. Thus, any differences between Group 1 and STC

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students that might be found in later analysis could not be due to differences in their post-school destinations.

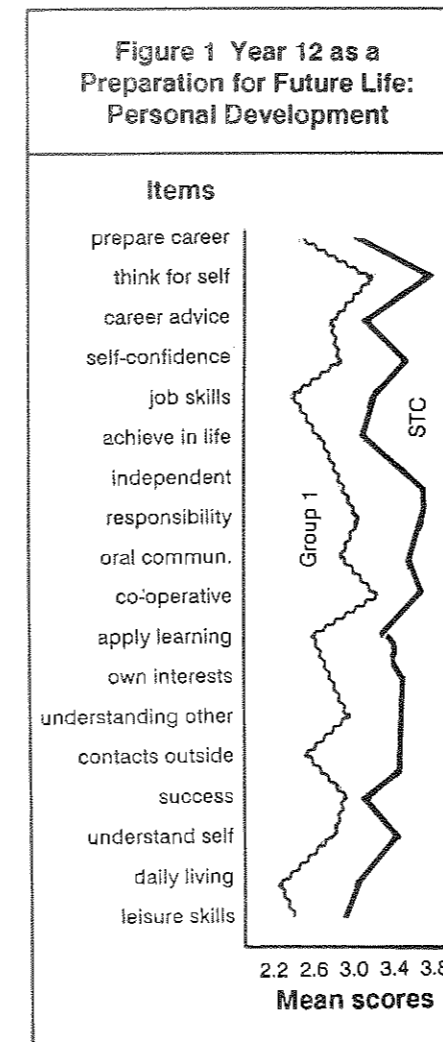
A Multiple Classification Analysis was applied to the data, taking into account four variables — gender, ethnicity, socio-economic level, and Year 12 course. All but one of the analyses failed to produce significant main effect outcomes. The significant effect was on the personal/social/career development scale for the variable of Year 12 course. It was evident that, compared with Group 1 students, STC students felt that these aspects of their Year 12 course were more useful to them in their post-school lives of work and study than Group 1 students did. An examination of the mean scores of the two student groups for the 18 items in the scale shows which of those items made the major contribution to the differences in the mean scale scores. The dimension of half a mean standard deviation was accepted as the size of a difference of medium significance between mean scores (Cohen, 1977).

Figure 1 shows that Group 1 students identified only three items as being useful to them (with a rating of 3.0 or more), while STC students felt that seventeen of the eighteen aspects of their course had been of use to them. The dimension of the differences in the mean ratings given by Group 1 and STC students was at least half a standard deviation on all but three items. A glance at the items which produced the greatest differences between the two groups show how wide-ranging were the skills, knowledge and competencies acquired through their Year 12 course by STC students, qualities that both employers and tertiary personnel would acknowledge as valuable attributes for a tertiary student or employee to possess:

- self-confidence
- independence
- oral communication skills
- job skills and knowledge
- apply learning to real-life situations
- follow your own interests
- understand other people
- establish contacts with people and resources outside school
- daily living and leisure skills.

The comments made by students in the

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open-ended section of the questionnaire confirmed the findings of the structured measure of students' evaluations of their Year 12 courses as a preparation for their post-school year, with many more positive comments coming from past STC than past Group 1 students.

Year 12 as a preparation for tertiary studies

There were about 80 respondents from the STC course who were undertaking tertiary courses in 1986 and about 180 respondents from the Group 1 course, and most of them wrote from half to one page of comments in response to the question 'What aspects of your Year 12 course have helped you most this year in your job, your study, your personal development, your life as a member of the adult world?'. All the comments quoted in this section are from students at universities or colleges of advanced education.

It is of particular interest to look at the comments of the STC students on the ways in which their Year 12 course helped them to cope at tertiary level, because this group of young people possessed certain characteristics that might be expected to work against a satisfying and successful first year tertiary experience: many of these students were from disadvantaged groups (in terms of social background); all had experienced a Year 12 course that was very different in orientation from the usual type of academic preparation for tertiary study provided by secondary schools; and all had gained entry by non-traditional means — a descriptive report, not an Anderson score which is commonly regarded by the community as the best predictor of tertiary performance.

Two benefits of the STC course that were seen as particularly relevant to tertiary life were its emphasis on the development of the individual as an independent learner and the development of self-confidence. The increased confidence was valued by students for different reasons: the confidence of academic accomplishment, confidence with people, confidence that leads to increased motivation in learning.

STC increased my self-confidence and my desire for learning. It put the usefulness of education in perspective. (STC student)

The STC course really boosted my self-esteem and made me more socially active and involved. I felt a great sense of success (within myself) and my accomplishments were recognised once I was accepted into a tertiary institution. I didn't feel inadequate as the Group 1 course made me feel. For once in my academic life, I felt like an equal! (STC student)

STC was one of the best years of my life. The course helped us to gain confidence in all kinds of skills that the Group 1 course doesn't. (STC student)

STC has helped my attitude to life in general, as well as helping me reach my goals. I have always been afraid to reach out for what I want but STC has pushed me. If it wasn't for STC I wouldn't have picked up the phone and rung different colleges. I'm glad I did, and without it I wouldn't be at college doing what I like best. (STC student)

My Year 12 course made me a much more confident person with myself and towards others. It was great! I don't know what I would have done if STC hadn't been introduced to my school. (STC student)

I love it at college, and I enjoy the people there. I get on (associate) very well with everyone, even though a majority (95%) of

students are mature age. I'm just like one of them. I believe and know that STC has helped me in this area, to associate with older and more mature members. I think it's because in STC students became more confident with the teachers. It was more of a friendship basis, which is one of the most important aspects in teaching. It's through this friendship relationship amongst/between student and teacher which has helped my association with mature age students. (STC student)

The STC course encouraged students to take responsibility for their own learning and to develop skills of independent learning and research, all of which stood them in good stead in their first tertiary year.

I'm really enjoying this year in Drama. I think that in doing STC last year I developed more sound studying abilities, having to be independent and acquiring my own information in the course last year. I feel my questioning techniques have progressed because of having to design work myself and researching abilities are also developed because I have had the chance to be more independent in the classroom. (STC student)

I've learned my responsibilities and how to cope with them from STC and I have been able to apply them within my course, which is one of the most important aspects. I know that it's up to you if you want to make it or break it, whether at college, with friends or life in general, and because of STC I'm prepared and positive I'm going to make it. STC has helped me a great deal. (STC student)

I strongly believe that completing the STC course in 1985 has helped me develop researching skills and has encouraged me to be self-motivated in many ways... Although I have encountered some negative aspects by undergoing the course such as exam pressure in tertiary education, I feel that I am more mature when it comes to self directed learning, where I have observed most HSC students do not know how to handle this sort of learning. (STC student)

Some past Group 1 students concurred with the latter observation. They complained about the narrow focus of their Year 12 courses and the 'spoon feeding' that discouraged them from thinking for themselves.

Although university life is the greatest, 1986 would have to go down as the worst year of my life without a doubt. Being out on your own after having everything 'handed to you on a plate' was extremely hard for me to get used to. The fact that no-one put any pressure on you to turn up to class or get work done made me very lazy. I believe that, because I was so used to being told what to do and how to do it at high school, once these pressures were off

me I just went 'wild'. (Group 1 student)

In retrospect, HSC fails to meet many of the qualities so vital to pursuing further education. Its tightly structured nature allows no scope for approaching a subject from a different stance. As a result, no real thinking is done. Nothing is questioned and analysis is usually so shallow and superficial that it can't be called analysis. The demands of covering the points in the syllabus in preparation for the all important end-of-year exams diverges the student from 'learning'.

The lack of being presented with extra-curricular material on a given subject is also a disadvantage for the prospective university student. Naturally, subjects at university are dealt with on a higher level, usually in a very obscure framework (to a former HSC student). It is easy to feel intimidated by the new dimensions taken on familiar subjects. (Group 1 student)

Past STC students identified particular aspects of their course which helped prepare them for tertiary education, aspects such as negotiation of classwork, work experience, a curriculum that was relevant to their future study needs.

STC helped me confirm what course of study I wanted to undertake. It gave me an opportunity to investigate all aspects of my chosen career, develop the skills I needed for further study, and study a topic in depth. Most of all I acquired more knowledge that was useful to me compared to previous years. I enjoyed the independence of gaining your own information and research. STC gave me the skills that I required for my study in psychology, and because I achieved all my goals in STC, I gained entry into the course and institution that I had as my first preference. (STC student)

I feel that the opportunity to be able to work in the particular field/career I was interested in (in this case primary teaching) by having two two-week blocks of work experience helped me tremendously. Not only in regards to helping me decide that teaching was what I wanted to pursue in a career, but due to the good references I received from there, the college was more ready to give me 'a go'. (STC student)

The STC course prepared me for academic life in a tertiary school, as we also do a lot of negotiating and non-competitive assessments. We also have many discussions and debates in tutorials. I find a lot of this similar to the STC requirements. (STC student)

There was one aspect of tertiary life for which Group 1 students felt themselves to have been better prepared by their course than STC students, and this was the ability to cope with a heavy workload, pressure, and examinations.

... it is worth pursuing the goal of a broader base of access.

The STC course didn't . . . prepare us for the work and exams that we have to face when completing a tertiary course. (STC student)

The hard work, and the amount of it, that was piled on us during HSC has prepared me very well for my science course, as I was able to cope with my workload this year. (Group 1 student)

This year has been hard work at times, but rather enjoyable. I believe that the dedication to study which is so much a part of HSC has been very helpful . . . HSC taught me to memorise facts for the exams, and these study methods which I developed have been most helpful while studying for exams this year. (Group 1 student)

I feel that HSC prepared me for exams — memorising, careful allotment of time in exams, competition, competition and more competition. University life is much more dependent. One must have high motivation since no one is prodding you to complete work. There is a lot of pressure and hard work involved but I feel that this only helps the individual to survive life at a tertiary level. Studying does not get any easier and if it's a professional job you're after then you must be prepared to work hard. (Group 1 student)

The only drawback is the excessive amount of work that must be done outside school hours and the pressure involved in doing the final exams. However the ability to cope with exam pressure gained by doing HSC has helped me in my course this year. (Group 1 student)

The ability to work hard is an important attribute for a tertiary student, and training in the memorisation of facts is useful for some courses; but a good preparation for tertiary study should include a much greater range of skills than these.

Conclusion

Increasingly, over recent years, universities and colleges in Victoria have accepted students whose access to higher education has been through non-traditional means. The majority of these students are either mature-age students or students from alternative Year 12 courses, such as the STC course.

The STC students in this study were part of that growing group of students who, from 1983 onwards, were deciding to stay on to complete their secondary schooling rather than leave school early. Success in their Year 12 courses encouraged many of these students to continue their education at tertiary institutions through special admission schemes. Because this is a recent

phenomenon, not a great deal of research has been done to monitor the progress of these students. Two Victorian studies (Schofield, 1988; and Stephens, 1986) have shown that special admission scheme students have a success rate in their first year of higher education that compares reasonably well with the success rate of normal admission students.

The students in the present study were contacted before their first year results were known, so the focus was on students' perceptions of the way they were coping at tertiary level, which included an evaluation of the current usefulness of the skills and knowledge they had acquired in their Year 12 courses. It is clear, from the outcomes of the study, that many of these STC graduates felt that they were coping well with their tertiary courses and were helped by their learning experiences in Year 12. The particular aspects of their STC learning experience that helped them most were first, the development of their self-confidence as learners (through achieving success in areas of learning that were of present interest and future relevance to them) and, second, their development as independent thinkers, learners and researchers, which was accomplished by allowing students to participate in determining the direction of the curriculum and by encouraging them to be responsible for their own learning, at the same time equipping them with the skills they needed to achieve their educational goals. Some of the students in the study who were graduates of the mainstream Year 12 course expressed regret that their course had not helped them to become independent thinkers and learners.

The message that emerges from this study for tertiary educators is that it is worth pursuing the goal of a broader base of access to higher education, because students thus admitted are likely to benefit from and succeed in the courses they undertake. The message for secondary educators is that attention should be focused on the learning process as well as on the content of learning, and on personal development as well as on academic development so that their exiting Year 12 students will be prepared and equipped to face the challenges of higher education.

References

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The student progress and performance study 1975-1988

The Student Performance and Progress Study (SPPS) was established at the Australian National University (ANU) in 1975 with the first data files set up in 1976. The impetus behind gathering student data was to attempt to identify the causes and to suggest policy formulations to reduce the high attrition rates seen in the 1960s. In those earlier years approximately one third of all undergraduates failed to complete their studies. This was wasteful of human and financial resources.

Originally, the study was meant to benefit from longitudinal data sets and be able to address the affects of specific ANU changes and influences. Previous research in this area was not always easily interpretable in terms of the ANU. Although there was a core of data that provided for longitudinal studies, alterations were made in the type of data stored as the specific interests of the ANU changed. This was achieved by altering the questionnaire material from the SPPS and ANU enrolment forms accordingly. In brief there were four main types of information that were kept on the SPPS computer files:

- Demographic variables eg. home address, term time accommodation, marital status, ethnicity, etc.
- Previous educational attainment, basis for admission eg. ASAT, TES etc.
- ANU performance, subjects and grades, withdrawals.
- University experience eg. expectations, motivation and methods of study.

Initially it was hoped to examine the destinations of ANU graduates but this has been regularly undertaken by the Careers and Appointments Service. The SPPS study was based mainly in the Office for Research in Academic Methods (ORAM) though there has been close cooperation with other units within the university, in particular with the Counselling Centre, Careers and Appointments Service and the Study Skills Unit. In addition, all reports are circulated to various key individuals to provide feedback into the system. This is particularly the case within the University where the Head of Careers and Appointments, Head of Counselling, Head of Study Skills, the Registrar, Dean of Students and Deans of Faculties are kept up to date on all SPPS studies. The SPPS programme was not intended to give rise to a

single study but was more to provide a series of continuing papers which are listed in Appendix A.

During the past 13 years some 31 reports have emerged, ranging from studies on student attrition to the performance and progress of students admitted under the adult special entry schemes. In general, the studies fall into four main categories:

● Demographic	9 studies
● University performance	
a) students who pass	15
b) attrition and withdrawal	10
● University experience	13
● Previous academic achievements	8

The rate of withdrawal from all units was not appreciably different between government and private schools.

There is of course some considerable overlap in most cases in that studies may examine the relationship between previous academic achievement and ANU performance or how demographic factors and student personal characteristics are associated with the withdrawal of students. An overall plan can be seen in Table 1 (Appendix B) where each SPPS study is numbered and coded into this overall scheme.

Earlier reports summarising the Progress and Performance Study up to 1978 were written by Bennett and Mortimore (SPPS 14) and Miller (SPPS 15). The latter report considered some of the implications of the findings to that date and included a number of recommendations from an informal working party consisting of representatives from different sections of the University. The four main recommendations from these meetings are listed below.

1. The University may wish to consider making greater use of diagnostic tests to identify any lack of computational or writing skills among incoming first year students. Bridging courses could be arranged for those students lacking the necessary skills.

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2. During Orientation Week students should be given more information on resources available to assist their learning, including the Study Skills Unit, the ANU Library and academic staff.

3. Marked differences in academic backgrounds of entering students were attributed to the range of courses available in Years 11 and 12 of feeder schools in the ACT, NSW and other States. A more generalised and flexible first year, at least in subjects which build on secondary school studies, was therefore suggested.

4. The highest percentage of cancellations or non-re-enrolment came from students who had previously completed tertiary courses elsewhere. The informal working party concluded that some of these students had underestimated the difficulties of undertaking further studies and it was suggested that course advisers should discuss the implications of this with such students.

External publications have been rare, mostly because of the confidentiality of the reports and often due to the study being specific to the ANU. It is also the case that the main impetus was to provide data on any ANU areas that might be causing problems or simply because no one knew the answers to many of the questions answered by the SPPS programme. However some external publications resulted from the SPPS data bank (Watkins, 1982a; 1982b; 1983 and 1984; Kilminster, 1988 in submission). Furthermore, Watkins also made public his findings on the expectations and realities of ANU life as perceived by 687 undergraduates. One of the major findings was that 38% of those students sampled reported motivational difficulties in their first year studies. Few students had anticipated such problems. When only school leavers were examined, the percentage of students reporting motivational problems rose to some 52%. Of course making formal policy decisions to improve motivational problems is difficult. However, by making such results public, it is possible that lecturers, counsellors and others responsible for students' academic or personal problems might eventually take notice and implement appropriate changes.

We shall now summarise the major fin-