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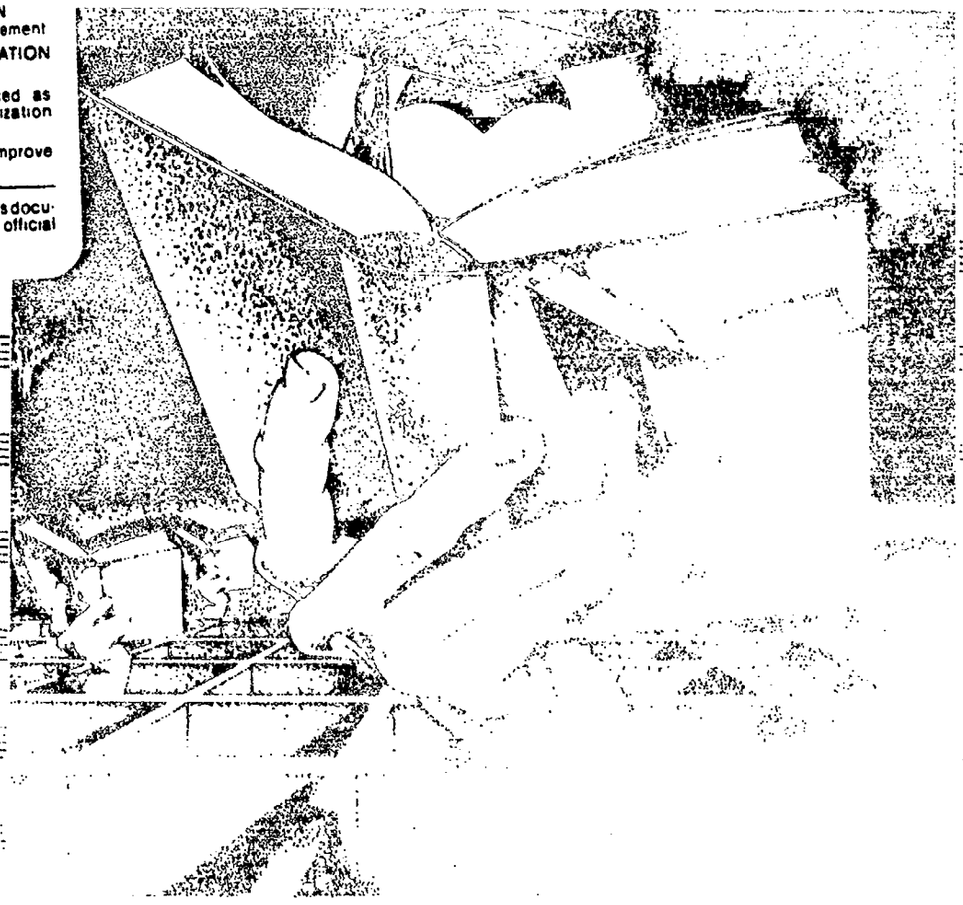
ABSTRACT

This study was conducted on the cost and utilization of study centers in six distance education institutions representing the three levels of higher education in Australia: colleges of advanced education, universities, and technical and further education. Data were collected using student questionnaires, student interviews, institutional questionnaires, and discussion with staff members at each institution. Specific aims included were to: (1) determine the types of facilities and services currently available at study centers and the level and nature of their utilization; (2) determine the facility and service needs of students and institutions; (3) identify the cost of providing additional facilities and services; and (4) formulate recommendations on preferred configurations of a study center, facilities which should be provided, provision of support staff and services, and arrangements for forming individual study centers into a network. Questionnaire and interview data are presented in separate chapters. The instruments used in the study are appended. (31 references) (GL)

The Cost and Usage of Study Centres in Distance Education

J. DEKKERS, M.P. MOLL



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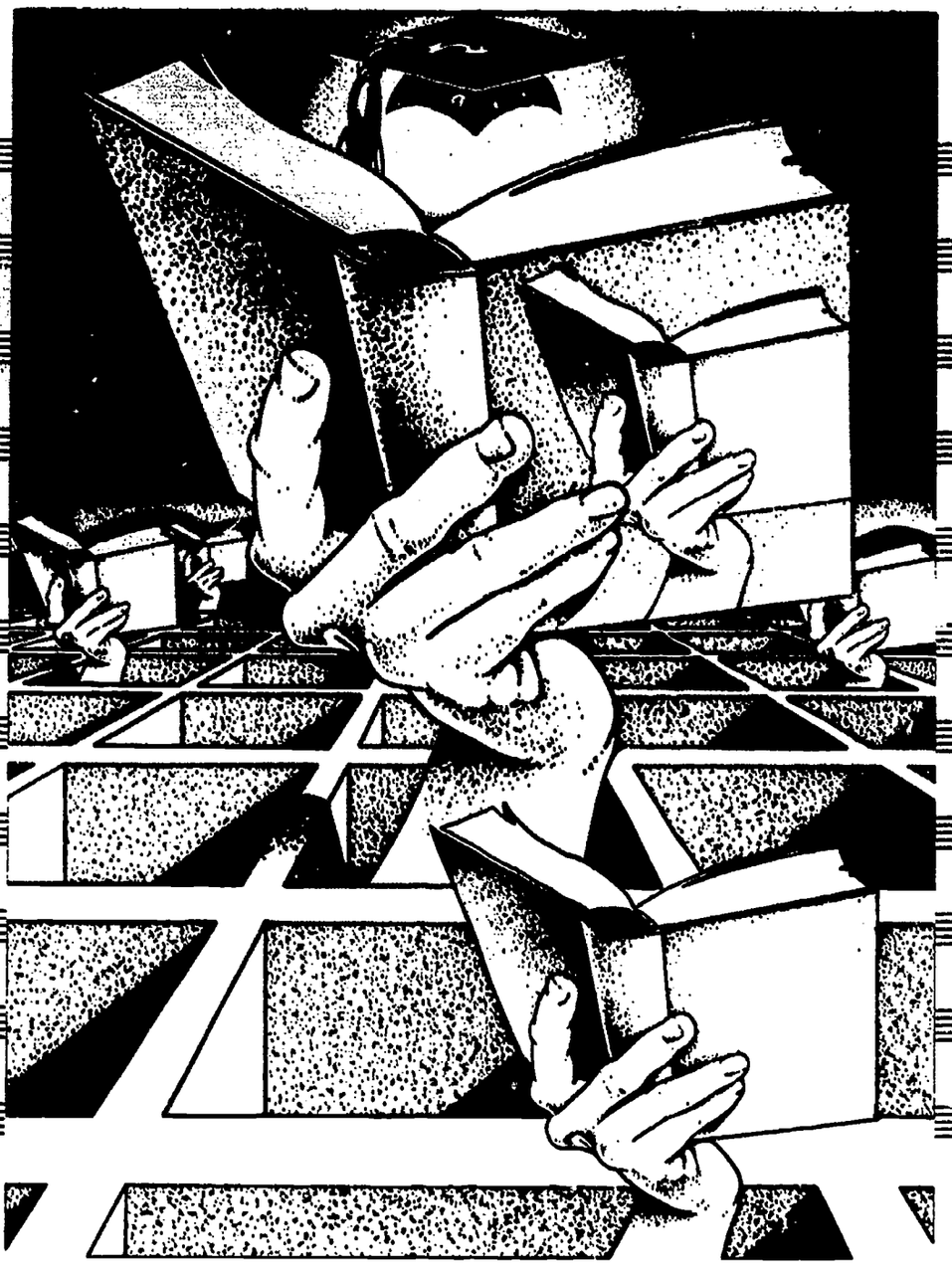

COST AND USAGE OF STUDY CENTRES IN DISTANCE EDUCATION

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The views expressed in this study are those of the authors.

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RECOMMENDATIONS

The recommendations of this report are as follows:

R1 *All distance education providers should give greater consideration to the use of study centres as a means of increasing student access to educational opportunities.*

R2 *Further research is needed to determine how institutions can make more effective use of study centres for student support.*

R3 *Distance education providers should all have a commitment to participate in the use of study centres for the delivery of distance education courses.*

R4 *In the establishment and maintenance of study centres distance education providers should staff centres with trained personnel and also involve the community in study centre functions to ensure that the centre properly cater for the needs that it is intended to serve.*

R5 *A national study centre network should be established that will enable the provision of educational opportunities and access to high quality education programs for students, particularly in remote locations, and be used as a means for the introduction and trialling of new educational technology and communications applications (e.g. satellite use).*

R6 *Further research should be conducted on study centre costing to obtain the measurement of non-direct costs and, if necessary, to prorate these costs on the basis of staffing, student load etc. as required by the principle of absorption costing of activities.*

R7 *Further research should be undertaken into the relationship between the use of residential schools and study centres and their relative efficiency and effectiveness.*

R8 *Further systematic and ongoing research should be directed towards the development of student support systems, of which study centres are an integral component, and take into account aspects such as:*

- *cooperative provision and use of centres*
- *funding arrangements (allocation of costs)*
- *application of communications technologies*
- *linking (networking) arrangements of centres*
- *services and staffing scenarios for centres.*

R9 *Instead of the term "study centre" a more appropriate term for off-campus locations for student support is "distance education access centre" (DEAC).*

SECTION 1

INTRODUCTION

1 INTRODUCTION

Delivery systems for distance education courses consist essentially of two components: study materials and student support services. Study materials are distinguished by the fact that they are capable of preparation in advance and are normally delivered to the student prior to the commencement of semester. Print is the main form of study material used but it may be supplemented by, or integrated with, audio and video cassettes, video discs, computer-assisted-learning software and home experiment kits.

Support services operate while the course is in progress and involve human interaction. though often via some technical medium. Academic support services involve interaction that facilitates the learning process and may include face-to-face tutorials, telephone tutorials, visits to study centres, on-campus study schools as well as written correspondence. Submission and return of assignments with appropriate feedback is an integral part of this support. Other types of support services associated with learning at a distance are administrative support e.g. enrolment advice, counselling and library services.

The types of delivery systems for a distance education course can be presented on a continuum. At one end, the course is highly self-instructional and thus requires a low level of student support. The development of such a course demands a high level of initial investment in courseware. At the other end of the continuum an extended-campus approach is used, whereby students attend local institutions for lectures, tutorials and so on. Such a mode of presentation requires a relatively low initial investment in courseware but demands an extensive tutor system using study centres or local support staff. These extremes would normally apply in practice in distance education courses in Australia. Typically most Australian distance education courses occur at some point on the above continuum. For any chosen point on the continuum there is a range of options for utilising the resources allocated to both study materials and support services. For example, resources allocated to support services can be devoted to providing support from the central campus, from study centres of the institution or from staff working independently of study centres either in their homes or in other institutions.

The design of delivery systems for distance education courses tends to take into account the following interrelated factors:

* *Aims of the course.* The degree of communication between lecturers and students that is incorporated into the delivery system will be influenced by the aims and objectives of particular courses. In some cases self-instructional materials will suffice but in others telephone tutorials or face-to-face contact at residential or weekend schools will be necessary to achieve some of the objectives.

* *Teaching philosophy of the institution.* The teaching philosophy of the institution may be such that it is essential that there be some face-to-face contact each year between students and academic staff. On the other hand the philosophy of distance education may be such that courses are designed to be mainly self-instructional necessitating independent study by the student.

* *Number of students enrolled.* This affects the instructional approach and teaching methods used. For instance computer-managed-learning is more likely to be used by large groups of students than small groups because of the initial resources needed to establish the system.

* *On-campus/off-campus availability of the course.* Institutions in Australia that offer distance education courses tend to make such courses available on-campus. The same academic staff usually teach both the distance education and on-campus course. Typically, materials produced for the distance education course are used on-campus. In such courses materials are designed for distance education students to meet the needs of both groups of students.

* *Cost of distance education.* Whilst accurate costing is difficult, it is clear that the up-front costs in the development and preparation of study materials are considerable. The cost involved varies with the level of sophistication of the study materials. The other major cost component is the system of ongoing support of students.

During the eighties the interplay of economic, political and social factors, together with developments in education and technology, have influenced the provision of distance education within Australia to a considerable extent. Among the most significant developments that have either taken place or are now taking place are:

* Cooperation between distance education providers in the provision of student support services through study centres, cross crediting arrangements, reciprocal library borrowing privileges and so on.

* Use of self-instructional materials for both on-campus and off-campus instruction.

* Cooperative development and exchange of study materials among institutions.

* An increased level of educational sophistication of courseware and delivery systems.

* Use of communications technology and computers for teaching and support activities.

* A gradual rationalisation of the number of distance education providers and courses.

* A changed clientele of students. There has been an increase both in the numbers of students who reside close to an institution and in the use of distance education courses in industry, commerce and professional development areas.

During the eighties the use of study centres as a component of support systems for distance education courses has been the subject of a number of reports (Gough, 1980; Castro, Livingston and Northcott, 1985; Northcott and Shapcott, 1986; Kemp, 1986). These reports and the associated literature reveal that rather limited data are available on student usage and the cost of operation of study centres. Furthermore, the majority of previous studies have focussed on study centres from an institutional rather than a student perspective.

In the Australian context, the term "study centre" is somewhat of a misnomer. The role and use of study centres as discussed in this report and described in other Australian studies places minimal importance on their use for individual or group study purposes. Alternatives such as "support centre" and "access centre" may therefore be more appropriate. However, the authors consider that use of the term "study centre" is such that another term may be misleading or confusing to the reader of this report.

SECTION 2

AIMS OF THE STUDY

2 AIMS OF THE STUDY

The aims of this study were as follows:

* To determine the types of facilities and services (including support staff) currently available at study centres.

* To determine the level and nature of usage of currently available facilities and services emanating from study centres.

* To determine the facilities and services which students and institutions would most like to be provided at study centres.

* To identify the cost of providing facilities and services at different types of study centres.

* To use the information gathered in relation to the above aims to formulate recommendations on:

  - the preferred configuration of a study centre

  - the facilities which should be provided at centres

  - the support staff and services which should be provided in conjunction with centres

  - arrangements for forming individual study centres into a network.

* To estimate the cost of providing study centres and support services in line with the recommendations.

SECTION 3

BACKGROUND

3 BACKGROUND

3.1 Evolution of Student Support Systems

Up to the early 1970s only a small number of universities were involved in distance education. Study materials were usually in the form of "lecture notes" and interaction between students and academics was mainly confined to correspondence by mail supplemented by compulsory residential schools or visits by lecturers to regional centres. Regional tutors were also used as a further means of student support.

At the University of Queensland, tutors or visiting lecturers held tutorials throughout a network of study centres. Each of these centres housed a library collection serviced by a librarian and, in addition to tutorials, the facilities were used for student counselling and study purposes (Kitchen, 1985).

Significant growth in the number of students and courses in distance education occurred in the 1970s. Much of this growth paralleled the establishment of new colleges of advanced education. There are now over thirty colleges of advanced education and seven universities offering distance education courses.

The sudden presence of many more distance education providers resulted in a diversity of approaches to course delivery and the provision of student support services. By the end of the seventies greater emphasis began to be placed on the preparation of study materials specifically designed for the learner at a distance, following the approach promulgated by the British Open University.

A feature of the increased prominence of distance education at the tertiary level was that, from a national perspective, both the growth of student enrolments and courses was relatively uncoordinated and unplanned at a national level.

The nature and diversity of support systems that evolved during the 1970s can be attributed to the interplay of six aspects.

* *Parity between external and internal courses.* There was a strong commitment to parity of standards between internal and external teaching and course content and while this helped to establish the credibility of external study, it did little to either enhance or give credence to the fact that learners at a distance have needs and demands quite different from on-campus students.

* *Demography of institutions.* The location of tertiary institutions within Australia considerably affects the types of support services that can be provided. For instance, in both Queensland and Western Australia a high proportion of students is considerably more isolated by distance and time than their counterparts in other states. Thus direct student/lecturer contact through on-campus visits by students or staff visiting students in regional centres is much more difficult and more costly than in the more densely populated States.

* *Changing nature of student support.* The commencement in the 1970s of the British Open University had a considerable impact on the provision of distance education in Australia. The Open University advocated the use of highly developed self-instructional material supported by a comprehensive system of academic and administrative student support throughout the country. Adoption of the Open University approach has been attempted by a number of distance education providers in Australia. Such a unified country-wide system is never likely to be cost effective in Australia as concentrations of student populations are too small and widely spread. However, and more importantly, few institutions in developing their student support systems appear to have initially defined their goals or to have had a well-defined philosophy for student support. Consequently, despite increased use of self-instructional or "stand alone" study

materials, student support in the form of teleconferences, local tutor support and other forms of academic support remains relatively unplanned and there is little evidence of the evolution of a common approach to the provision of support services for external students.

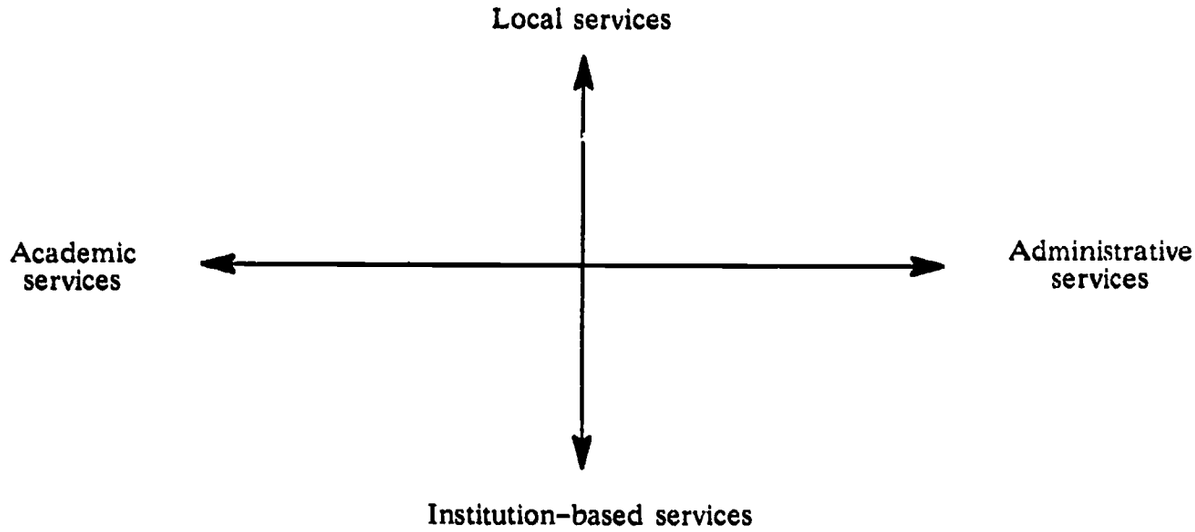
- *States rights in education.* Inappropriate or non-existent policy and funding arrangements at the State level and between State institutions have caused barriers in the provision of distance education at a national level. A major implication is that this has prevented the development of appropriate support services for students across State boundaries.

- *Institutional identity/status.* During the 1970s most colleges of advanced education and a number of universities were in an early phase of development and were endeavouring to establish their identity. This initially created barriers to the establishment of cooperative arrangements and the undertaking of collaborative work, particularly in regard to funding which still tends to be based on the "ownership" of students.

- *Funding for support services.* Funding for support services has generally been on a relatively ad hoc basis rather than as an integral component of the provision of distance education programs. This applies particularly to the use of study centres and teleconferencing as these have been seen as supplementary support to the study package.

To summarise, the type and location of support services can be shown along two dimensions as shown in Figure 3.1.

Figure 3.1
Type and location of support services



Most student services in Australia are institution-based and clearly defined as either academic or administrative. However, an increasing number of institutions have localised both academic and administrative student support (Dekkers and Sharma, 1988).

3.2 Reports on Student Support Services

There has been a series of reports arising from investigations into support systems for external students in various Australian contexts (Gough, 1980; Mannison, 1982; Castro, Livingston and Northcott, 1985; Kemp, 1986; Northcott and Shapcott, 1986; Kelly, 1986; Kember and Dekkers, 1987; Holzknecht, 1987). These reports are reviewed here insofar as they are related to the issues of what support services are available throughout Australia and how external students use and evaluate the services and facilities that are offered to them.

3.2.1 *DIVERSITY OF SUPPORT SYSTEMS*

The available literature on support systems for distance education students in Australia points to a diversity of support as one would expect, given the institution-specific way in which those systems have evolved. The commonality among Australian institutions lies primarily in the fact that it is usually the same academics who prepare the study materials and offer ongoing academic support for students, and the provision of administrative support through a separate department of external studies.

Gough's (1980) report provides an overview of study centres in distance education in Australia and overseas. With reference to the regional network established by the British Open University, Gough writes:

> The report of the planning committee on the Open University (1969) recognised the 'great advantage' that could result from face-to-face meetings. The development of the counselling service was of particular importance to the planning committee. Part-time, face-to-face teaching and group discussions were to be components of a 'fully integrated teaching system', and the establishment of 'study' or 'viewing' centres was seen as a matter of urgency. It is worth noting that the report, while offering the principle of home-based study, did not describe face-to-face meetings as optional or peripheral. Indeed, along with 'summer schools', they were seen as highly desirable. (p. 9)

For Gough this presents a paradox:

> On the one hand, efforts are being made to construct for the learner an educational experience that will be intellectually complete and academically respectable; theoretically it may be enjoyed without attending the campus, (...). On the other hand there are increasing efforts to improve communication and interaction between the distance student and his teacher, and between the students themselves. Indeed, there have been efforts to make provision for attendance at centres other than the main campus. (p. 4)

We note that, paradoxical or not, Australian institutions all attempt to provide some measure of support services along with provision of study materials. The extent of the services provided by any particular institution for its students will depend, as mentioned earlier, on the overall approach to distance education that it adopts, and there is a diversity of approaches throughout Australia.

Castro, Livingston and Northcott (1985) documented this diversity and some extracts from their volume which typify the Australian scene will serve to illustrate this point:

University of Queensland

> ..study centres play an important role in establishing a University presence in Queensland's rural communities. (p. 22)
>
> Essential centralised services which affect all external students must obviously take precedence over regional services which, in their present form, cannot reach all students and which are not used by all students who could access them. (p. 27)

Darling Downs Institute of Advanced Education

> Study Centres are mainly used for pre-planned teletutorials which are integrated with other study and computer-managed learning material, and for study group meetings. (p. 29)
>
> Although lecturing staff seldom visit study centres, the Institute has decentralised its student support system more than other distance education institutions with its Regional Liaison Officer network. (p. 31)

Deakin University

> From the outset, Deakin University adhered closely to a philosophy of distance education as espoused by theorists like Baath (1981) in that effective learning material for distance students should be able to stand alone without the supplementation of physical contacts between students and tutors. (p. 37)
>
> They (study centres) were not intended to provide a forum for any academic assistance to students. However, it was anticipated that where enough students in a district were enrolled in the same course, a tutorial class would be formed meeting under the guidance of a local tutor appointed by the University. (p. 38)

Victorian TAFE Off-Campus Network (VTOCN)

VTOCN Off-Campus study centres:

> ...have academic as well as administrative responsibility for their locally enrolled off-campus students. (p. 41)

Gordon Technical College, a part of VTOCN, acts as a study centre, for example:

> By being part of the Gordon Technical College, off-campus students have access to all facilities normally enjoyed by full-time students, such as counselling, learning resources, the use of computers etc. (p. 43)

Tasmanian College of Advanced Education

> The teaching style in courses offered at the centres is evolving. In formal terms some units are offered by face-to-face teaching while others are available externally. In practice the distinction between the modes often becomes blurred. If external study materials are available for 'face-to-face' units the 'lecture' is often turned into a

> tutorial or seminar discussion of the study materials. For 'external' units the lecturers located at the study centres offer higher levels of tutorial support than is normal for courses offered by distance education. (p. 75)

Western Australian Institutions

> External studies is regarded by Murdoch, WAIT and WACAE as a mode of study complementing internal full-time and part-time courses. Once admitted to a course, a student can elect the external mode provided that the unit is available externally. In consequence, many enrol as 'mixed mode' students studying partly internally and partly externally. The great majority of external students are in fact in the metropolitan area. (p. 82)

South Australian College of Advanced Education

> Individual support is offered variously by teaching and administrative staff to all students, although not necessarily to the same extent. It is often course specific and is explicitly directed to meeting students needs. It is taken up only by those students who wish to do so. From our perspective, the greater part of student support should be of this kind and largely, if not entirely, the responsibility of the teaching staff. (p. 103)

Castro, Livingston and Northcott argue that the following factors contribute to the diversity of provision:

* academic and administrative support activities at a centre are supplementary to basic teaching/learning that is done through the study materials
* facilities and resources available tend to be dependent on number of students in the region, financial support available from the institution and community support
* institutional philosophy or approach to interaction between teaching staff and students, for example, where direct or centralised contact is encouraged, use of study centres is limited
* quality of instructional material - where materials are not well developed the study package may be supported by local tutors and other local support.

3.2.2 *STUDENT PERCEPTIONS OF SUPPORT SYSTEMS*

With particular reference to regional services Gough (1980) asks what aspect of these is the most important from the students' perspective?

> ... is the study centre nothing more than a four-walled 'shell' that houses the real 'egg' - namely, the personal interaction offered by a tutor-counsellor or mentor system? If it is, will the use of the study centre as a student support system lose significance and make way for alternative and more efficient means of support for students? (p. 15)

The other methods which he has in mind are a tutor-counsellor system, a mentor system, self help groups or use of technology for two-way communication.

In his investigation of study centres in Australia, Gough looked at four distance education systems in three Australian States: University of Queensland (Queensland); Riverina-Murray Institute of Higher Education (New South Wales); Royal Melbourne Institute of Technology (Victoria) and Deakin University (Victoria).

His aim was to 'identify the factors that may be relevant to the effective operation of a study centre' (p. 28). Included in the investigation were interviews with students of the above institutions, using a schedule of detailed questions.

Gough summarises the students' perspective overall:

> Firstly, in all systems the amount of use of study centres generally by off campus students is limited. A single exception might be the VTOCN system where considerable numbers of students seek information or advice from the off campus centre. Clearly however much of this contact is quite routine often by telephone and quickly dealt with. Queensland centres are used rather more for tutorials. Deakin study centres, Melbourne excepted, received only minimal use. Overall the use made of study centres is much less than is considered desirable by the institutions that provide them. (p. 192) (Emphasis added.)

Gough goes on to discuss those factors which might influence the use of study centres by students and these include: personal choice; factors related to the study centres themselves and factors related to the institution and its courses.

Under the discussion of personal factors he is anxious to dispel the myth that external students wish to be entirely free of attendance requirements.

> This assertion does not have the general validity often assumed. For some students the choice of the off campus mode is dictated by circumstances such as distance or scheduling. Occasional attendance requirements may be welcomed by these students. For them the choice of this mode reflects a desire to avoid the rigid attendance demands of an on campus course but does not imply that they are unwilling to attend occasionally. Whilst some do not require social contact or feel the need to participate in tutorials others value personal interaction. Discussion with off campus students indicated that the proportion of those preferring not to attend either campus or study centre for virtually any purpose would be at the most 20 to 25 per cent. (p. 192)

Gough does not attach too much importance to the physical facilities as determinants of attendance.

> It can be concluded from the foregoing discussion that while physical aspects of the study centre should not be ignored they are not the most critical factors. There is little evidence to suggest that in general they either keep students away or encourage their attendance. The exception, of course, is library materials. (p. 194)

With regard to libraries he goes on to add:

> What is clear however that it is not simply the availability of books at study centres that is the important factor - it is the availability of the librarian as a resource person who can provide advice and who can negotiate on behalf of the student when he needs materials not available at the study centre. (p. 195)

On the matter of institutional factors, Gough points out that both the requirements of particular courses such as the mix of media used, and the philosophy of the institution will influence the degree to which access to a study centre is important for students.

Kemp's (1986) study also tried to identify those services which were of most value to students. Institutions were asked to identify the three services which they considered to be of most value to students. These results were summarised as follows:

> The message here is clear. Aside from library services, almost all the other services judged to be of value to students share the feature that they facilitate two-way contact between staff and students. Indeed, residential schools and local staff make available face-to-face contact. (p. 19)

Furthermore, the support services which were deemed to be of most value, i.e. those which facilitated two-way interaction between staff and students, were also reported by institutions to be the most costly to provide. In mixed mode institutions, though, these services were often calculated as a marginal cost.

Kemp's summary of the utilisation of support services by external students accords with Gough's analysis:

> Utilization of any support service by external students is dependent on the interaction of three sets of related factors. Firstly, utilization is influenced by college controlled factors such as the location of study centres, hours of access to centres or campus based facilities and costs to students in accessing these facilities. Secondly, utilization varies with student learning characteristics and student need for the service. And thirdly, utilization varies with the particular courses of study in which students are involved, with the design of these courses as manifested in the study materials they make available to students, and the interaction with support services which course designs demand. (p. 22)

Northcott and Shapcott (1986) also devised and distributed a questionnaire to various groups of students throughout Australia and replies were received from groups in Western Australia, Victoria and Queensland. The findings which resulted from this questionnaire are summarised briefly below:

* Unless there are regular tutorials scheduled in the centre, most external students who have access to a centre would see it as being peripheral to their studies.

* Students tend to identify the centre with the person who is in charge of it. The personal qualities of this person and the way they exercise their role have a direct bearing on the amount of use made of the centre.

* Those students who use centres gave the following as their reasons for doing so:

  - availability of tutorial assistance;
  - their need for continued support and interaction as they tackled more advanced subjects;
  - the physical setting ...;
  - friendly and supportive staff;
  - availability of essential resources such as library materials;
  - opportunities for interaction with other students;
  - their need for a quiet place to study away from family distractions. (p. 45)

These findings are in accord with Gough's (1980) study centre review.

A further study which is directly relevant to this project is by Mannison (1982) on an evaluation of the external component of the Bachelor of Education course at Brisbane College of Advanced Education in Queensland. Data were collected by in-depth interviews with 46 students, 19 of whom were living more than 500 kilometres from the main campus in Brisbane.

Three aspects of these interviews are of interest to this study: students' perceptions of the advantages and disadvantages of external study; helpfulness of the student support systems; and, students' perceptions of their lecturers.

The main disadvantages expressed by the students were: lack of contact with lecturers; lack of access to resources for study; and, lack of contact with other students.

Mannison explored the problem of lack of contact with lecturers more fully.

> The problem referred to most often when students were asked what made studying externally difficult for them was the lack of contact with lecturers. Looking at the actual words used to put this point, it would appear that students are by and large referring to ambiguities in the notes related to what the assignments require and what the lecturer expects (...), rather than missing the opportunity for further discussion of the subject matter per se. That students are primarily concerned with clarification of expectations is further borne out by the general belief that the most successful teletutorial sessions are where more time is spent discussing assignments (as opposed to further review by the lecturer of the subject matter). (p. 13)

Lack of face-to-face contact with other students was also a problem expressed by students in Mannison's study, but the researchers note that the comments on this issue ' ... referred specifically to missing the opportunity for further discussion on the subject matter (...)'. (p. 14)

Furthermore:

> No student complained about the services of the External Studies Library, but they did have problems about the availability of resources (...), and the difficulty of finding relevant material (...). Many of them wished that resources were housed in local libraries. (p. 14)

The student services which were seen as most helpful by the students were those that endeavoured to remedy the perceived disadvantages of external study: visits by lecturers; an academic advisor program; vacation schools; regional tutors; personalised notes and correspondence from lecturers; orientation programs; resources in regional centres; and, establishment of self-help study groups.

With regard to the way in which students perceived their lecturers, the most valued characteristics were interpersonal and communication skills such as empathy, understanding, approachability and accessibility. Work skills such as promptness in responding to queries and in returning assignments and good organisational skills were also highly valued, as was enthusiasm for the subject. The characteristics of lecturers which annoyed students most were being unhelpful, providing slow or poor feedback and having illegible handwriting.

Research by Kember and Dekkers (1987) on the role of study centres for academic support lends further support to the findings by Gough (1980) and Mannison (1982). The main conclusion from their study was that the overwhelming body of students consider academic support valuable in remediating problems with the study materials. Further, they found that meetings at study centres are more likely to be attended if they are lecturer/tutor initiated and focus on learning difficulties or problems encountered in using study materials.

In further research, Holzknecht (1987) carried out a survey and a series of interviews with TAFE students enrolled in the Technical Correspondence School (TCS) in Queensland in order to:

> ... investigate and clarify the specific needs of isolated and disadvantaged groups with respect to course structure and presentation, and student support. (p. 11)

Students' responded to questions concerning the extent to which their study materials were supplemented by face-to-face or telephone contact with a tutor, and their preference for this kind of contact. Sixty per cent of students said that their study was characterised by minimal contact, but 86% expressed a preference for contact with a tutor, either face-to-face or by telephone.

The students were also asked to list three things they liked and three things that they did not like about external study. High on the list of advantages were the facts that study did not conflict with work commitments, that it provided access to courses for students in remote areas and that it enabled adults to return to study.

The main expressed disadvantages were feelings of isolation arising from alienation and lack of adequate communication, inadequate feedback on work done and the problem of imposing self-discipline in study.

The interviews that Holzknecht also conducted were used to bring out results of the survey data. What emerged from these interviews was the fact that students valued the possibility of making contact with TCS when the need arose, even though they seldom made contact. A picture of isolation from other students also comes through quite strongly: even when they knew of others doing the same course, there appears to have been very little contact.

The final research to be reported here is that conducted by Kelly (1986) on a sample of external students from the University of Queensland. This survey focussed on the use and evaluation of the support services offered by the University of Queensland. The picture that emerged in regard to regional services was one of unequal access to these regional services coupled with a lack

of use of these facilities by many of those students who could easily access them. Those who did use the services, however, expressed a high degree of satisfaction with them, in particular with the librarians who staffed the regional libraries.

When asked whether they had any contact with their lecturers during the year either face-to-face, by telephone or by mail, 33.2% of students indicated they had no contact, 8.1% had frequent contact and 58.7% had infrequent contact. Those who had contact claimed that it was a useful aid to study.

3.2.3 *TYPOLOGY OF STUDY CENTRES*

A report by Northcott and Shapcott (1986) aimed to provide a picture of the overall pattern of provision of support services. The terms of reference of Northcott and Shapcott's report were: to provide models of student support systems throughout Australia; to present some student perceptions of study centres; and to evaluate alternatives to study centres.

Northcott and Shapcott adapted a questionnaire from the study by Kemp (1986) and distributed it to tertiary institutions not included in his study, including TAFE external studies departments, and universities. A separate questionnaire was also sent to coordinators of a sample of Continuing Education Centres. Their findings reflect the diverse pattern of support services referred to in previous studies.

They then devised a typology of centres that embraces the types of study centres in existence in Australia. The typology is based upon physical facilities and support services that may be present at a centre. A modified version has been used in this study. The typology is as follows:

Model 1 Regional Outreach Centre

This type of centre fulfills the role as a central local facility for tertiary institution services e.g. Northern Territory External Studies Centre. The centres have full-time coordinators and other staff who assume a proactive role towards students and who exhibit a high public relations profile. They provide services for students from many institutions and a wide range of facilities is provided.

Model 2 Institution-based Centres

Two types of centres located within an education institution can arise:

* *Model 2A*: Centres as part of a network of campuses such as the TAFE Off-Campus Network in Victoria with the same access to resources and personnel as internal students. Students may be enrolled at the campus which operates as their study centre, and the staff of that centre maintain student records, monitor progress and provide general learning management services.

* *Model 2B*: The 'host' institution offers to off-campus students of other institution/s access to resources and perhaps a contact person for advice but is unlikely to be proactive in relation to those students. The centre may or may not be a specially designated reception area for students of other institutions, for example, the Capricornia Institute Gladstone Centre.

Model 3 Community-based Study Centres

Two types of community-based centres can arise:

* *Model 3A*: A centre located within a community facility such as an Education Centre. The study centre role is one of a number of functions performed by the centre for the community.

* *Model 3B*: These are centres established and funded by distance education providers for use as local centres by their external students. For example, the University of Queensland's Centre at Mackay. The local community may participate in the management of the centre.

Northcott and Shapcott (1986) believe that circumstances are now right for the evolution of a national network of study centres. These would utilise the existing diverse range of study centres. The circumstances are:

* a growth in the availability of electronic information technologies with their potential to promote networking

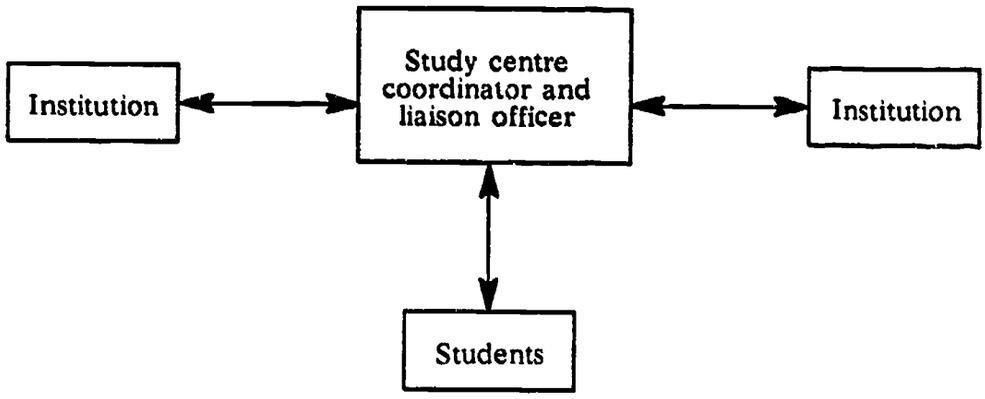
* growing evidence that the most useful function for local centres could well be in the area of educational brokerage services

* progress made by library associations towards cooperative provision for off-campus students

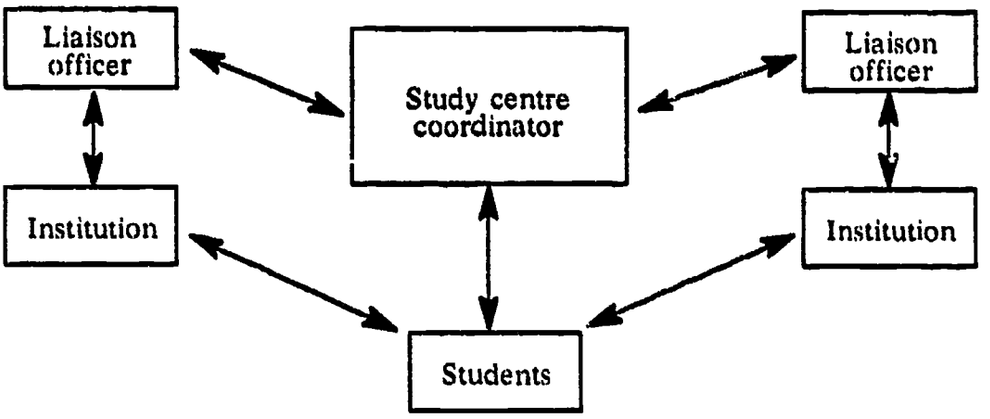
* progress made by distance education providers in the cooperative use of local centres.

More recently, participants in an ASPESA Queensland State Workshop, reported by Bowser et. al., 1987, proposed two organisational models for the operation of a study centre. These are depicted below.

Model 1



Model 2



Model 1 is more appropriate in areas where a large number of external students warranted the presence of a study centre coordinator whose role would be overseeing use of the centre by students and staff of institutions. The coordinator would be backed up by liaison officers who would give specialised assistance to students and act as a contact between the institution and the student.

Model 2 incorporates the roles of the study centre coordinator and the liaison officers. This model was seen by the workshop participants as most suitable for areas where student enrolments were either small or dispersed over a large area.

The possible and desired roles of the study centres, delineated by the workshop participants, were as follows:

* assistance for students with academic and administrative problems and difficulties
* handling of enquiries and applications and course enrolment
* educational brokering
* provision of library facilities
* tutorial support for students.

Major problems and issues regarding cost effective use of study centres were determined by the workshop participants as:

* *Lack of policy.* There is generally no publicly stated institutional policy and a policy vacuum exists on joint use of facilities.

* *Duplication of centres in a location.* In a number of cities several sites are being used where one site would result in more resources being made available to equip centres adequately.

* *Use by other groups.* Increasingly the number of other groups using centres could result in more facilities being made available.

* *Equipment acquisition and usage.* There is currently little real coordination over the acquisition of equipment for centres e.g. computers, teleconferencing equipment, photocopying.

* *Staffing.* Properly trained staff are seen as essential to efficient and high level use of study centres.

* *Site use.* There is a need for access outside normal working hours, 24 hour access being preferred.

3.3 Cost of Study Centres

In Australia there is a dearth of specific information on the cost of study centres. This is not unexpected, as only recently has the cost of provision of distance education has come under critical scrutiny by government authorities and even now precise costing of distance education is still not fully understood (Sharma and Ng, 1986; Ashenden, 1987). However, there are some past studies and some recent reports that provide a window on this issue. Hence these will be considered as background information for this study.

In investigating the contracting of higher education courses to regional TAFE Colleges within Western Australia, Walsh (1986) mentioned that the latter were '... emerging as de facto study centres'. But this function appears to be ancillary to their main function of face-to-face teaching of first year degree courses.

The Western Australian Post Secondary Education Commission has suggested that recurrent funding be split 75:25 in favour of TAFE, that is, 75% of funds going to the host TAFE college and 25% to the higher education institution. This is tantamount to an allocation for 1987 of approximately $4800 per equivalent full-time student for a Model 1 centre. Walsh does not state what percentage of these funds, if any, were used by the contracting TAFE Colleges to support non-contract external students' study centre support activities.

Dekkers (1986) provides some estimates of study centre costs for one institution in respect of the 1986 academic year. This report provides the following conclusions:

* Teletutorials offered through a network of study centres provides a cost efficient vehicle of communication, costing approximately $5 per student.

* The direct cost of provision of study centre access for students living within 30 minutes drive of a study centre was $16 per student.

* The total funding for the outreach student support system for the case study institution was estimated to be $56 per external student in 1986.

Ng and Sharma (1987) examined several aspects of cost efficiency related to Australian higher education external studies. Whilst not focussing on study centre costs, this research reported the following findings:

* Australian higher education external studies is at least equal to or more cost efficient than internal studies.

* External studies have significant fixed costs which generate economies of scale.

* The cost of student attrition is relatively high for external studies.

* Data collected on Science and Technology distance education courses offered by Australian higher education institutions suggest that 0.3% of the recurrent costs appertain to 'student support' in study centres.

* While of interest to this study, the above findings do not provide information on total cost of study centres.

These researchers also suggest that the direct costs of 'student support' in study centres was approximately $14 per equivalent full-time student for 1986 in Australian higher education institutions.

3.4 Use of Study Centres for Support Services

Study centres are by no means a feature of distance education provision for many of the tertiary providers. There are essentially three reasons for this. An often cited reason, is that it would not be possible to have centres incorporated as an essential element of a distance education course because not all students:

* Can use them and thus these students are at a disadvantage. This is particularly so in Queensland and Western Australian where there are numerous very small towns and homesteads in isolated regions.

* Would want to use a study centre. A proportion of students study by distance education because they seek to be autonomous or independent learners. Furthermore, a number of students and institutions would take the viewpoint that having to attend or use a study centre is restrictive of both time and place for learning.

Musgrave (1988) uses secondary distance education cost data to show that a potential savings of the order of about 15 to 20 per cent may be possible following consolidation of Australian external studies institutions. Such a cost reduction is seen as emanating from economies of scale related to the fixed costs of preparation and production of distance education courseware.

Also more recently, Dekkers and Sharma (1988) estimated the cost of an Australian external studies student support system at $3000 per EFTSU (at December 1987 prices). They reported that this figure was consistent with corresponding computations undertaken for the UK Open University.

A further reason for institutions not using study centres is that they would be contrary to the institution's teaching philosophy. This is particularly evident in the provision of distance education in New South Wales, for example, at the University of New England.

Much of the debate regarding whether or not to use study centres focusses on the notion of centralised versus a decentralised model of support services. Reasons for the position held by most institutions can be narrowed down to two issues, economics and the perceived need for face-to-face contact. Study centres are perceived as expensive to establish and maintain and maybe even over-capitalised. Furthermore, apparent low usage as reported by a number of investigators (e.g. Gough, 1980; Northcott and Shapcott, 1986) helps to reinforce the perception that they are not a viable proposition. This is despite the fact that very little cost data are available on the use of study centres in student support. Instead a number of institutions have compulsory on-campus residential schools (for example,University of New England, Mitchell College of Advanced Education, Riverina-Murray Institute of Higher Education, Gippsland Institute of Advanced Education). These are not only seen as a venue for lectures, tutorials and workshops but also serve to establish students' identity with the institution, establish student-lecturer rapport, provide a better understanding of operation of the institution and establish student contacts. Social functions are seen by both staff and students as an important component of residential schools. It needs to be pointed out that for a number of courses, especially in the sciences, residential schools such as those held at Capricornia Institute and Gippsland Institute of Advanced Education are to enable students to use laboratories and specialist facilities which are only available on campus.

A number of institutions, for example, Capricornia Institute, Riverina-Murray Institute of Higher Education, Darling Downs Institute of Advanced Education, University of Queensland, use a combination of centralised and decentralised services to provide student support.

Based on the literature referred to in this section, the uses of study centres are summarised as follows:

Student Use

- use of library collection and librarian assistance
- use of computer equipment and software on a 24 hour access basis
- to attend teleconferences or view video
- use of photocopier
- meetings/interaction with students and other persons. Purposes include: study groups; basic personal contact; problem solving sessions; sharing problems; social functions; learning from others about the system and its requirements; finding out what problems other students have
- study purposes (private or group study)
- to attend presentations and functions by institution staff. For example: orientation; tutorial workshop, seminar; problem solving sessions; course enrolment, academic counselling
- to seek administrative counselling or advice
- to seek support and assistance (centre staff or students) to overcome barriers imposed by distance
- to sit for examinations.

Institutional and Community Use

- venue for institution activities in the community
- institutional presence for promotion and liaison purposes
- enrolment and course advice for both potential and already enrolled students
- to foster community interest in education
- to provide educational brokering services
- assist students understand/develop institutional requirements and ethos.

Drawing upon the same literature, five components can be identified that will lead to the establishment of a study centre that will achieve high usage and demand by students. These are provided in Table 3.1.

Table 3.1
Components of a Successful Study Centre

Components	Items
A physical facility	- Location is readily accessible to students. - Rooms are available for seminars/ teleconferences, private study, - Library, computing facilities are available. - Easy after hours access is available. - Comfortable facilities are available for study and group interaction.
Relevant resources, equipment and services	- A library collection that meets course needs - Computing facilities are reliable and a software collection is available. - Reliable A-V/teleconferencing equipment
Cooperative tertiary users	- Institutional users share cost of equipment, facilities and rental. - Users participate in the management and operation by the institution.
Community support	- The community contributes to the resources, operation and management of the centre. - The community encourages tertiary access.
Support Staff	- Support staff are properly trained and enthusiastic. - Local tutors are able to provide academic counselling, administrative and resource advice - Administrative staff are able to act as a resource person, counsellor and assist potential students, manage the centre, provide publicity and liaison and organise activities at the centre.

3.5 Summary

As a component of the student support system, a strong case can be made for the use of study centres. Taken together, the findings of various research studies provide evidence that, in the main, external students do not wish to be entirely cut off from face-to-face contact with lecturing and support staff of the institution in which they are enrolled. Neither do they wish to be cut off from contact with other students, though reasons for wishing to communicate with lecturers and with other students may be quite different. Overall the problem of access to library and other resources for study is a central concern to external students.

However, in the Australian context, study centres are not an essential component of course delivery and are seen as supplementary to the study package and other forms of communication that does not require a study centre. As a consequence, there is evidence that study centres are all too often under-resourced. The reluctance of institutions to provide appropriate resources for study centres is compounded by the fact that, shown in the foregoing, the services and facilities provided by institutions to aid external students in their study are under-utilised. It also appears that many who could access centres and the associated resources do not do so and a proportion of students do not make contact with their lecturers even though on the surface there is nothing to prevent them from doing so. This is notwithstanding the fact that a high proportion of external students live within reach of the campus of the institution with which they are enrolled.

The reluctance of institutions to provide additional resources in terms of student needs requires comment. The review of the literature does reveal a lack of proper costing evidence for the operation of study centres. What is known is that the actual costs may only represent a very small fraction ~1% of total student cost. It has also been shown that use of a study centre is a function of quality and quantity of services and facilities. Thus the poorer a centre is resourced the lower will be its use by students and institutional staff.

In summary it appears that student and institutional use and institutional cost of a study centre depend upon:

* location of the centre from a student's home and related factors e.g. access hours
* student learning needs and characteristics
* level of utilisation required by a course
* quality and commitment of study centre staff.

SECTION 4

OVERVIEW OF RESEARCH

4 OVERVIEW OF RESEARCH

The six institutions which participated in the project represented the three levels of tertiary education in Australia: colleges of advanced education, universities and technical and further education.

Questionnaires and interviews were used to collect data from students studying with these institutions on aspects of their use of study centres and their perceptions of the service which the centres offered. This was done in order to assess student perspectives on study centres.

In addition, motivational data were gathered on cost and usage of study centres through questionnaires and by discussion with staff of the institutions.

Thus the study had four separate data gathering components which addressed both student perspectives and institutional perspectives:

* Student questionnaires
* Student interviews
* Institutional questionnaires
* Discussion with institutions.

Each of these is reported in detail in the following sections:

* Student questionnaires (Section 5)
* Student interviews (Section 6)
* Institutional questionnaires (Section 7)
* Discussion with institutions (Section 7)

In order to distinguish between the different types of study centres used by the institutions, a modified version of a typology of study centres devised by Northcott and Shapcott (1986) was used. The different types of study centres used by institutions were as follows:

* *Type 1.* A centre where conventional teaching/tutoring is offered in support of study materials prepared elsewhere, to full-time and part-time students e.g. Mackay TAFE (Qld) is used by full-time Capricornia Institute students.

* *Type 2.* (Northcott and Shapcott (Type 2A)). Study centres located within TAFE institutions e.g. Mt. Isa TAFE is used for local support by Capricornia Institute, Darling Downs Institute of Advanced Education and the University of Queensland (Qld); Gordon Technical College (VIC) can be used by any TAFE student.

* *Type 3.* (Northcott and Shapcott (Type 2B)). Study centres located within the main campus of a CAE or University e.g. the Toowoomba campus of Darling Downs Institute of Advanced Education is used to provide local support for external students enrolled with a number of providers including Capricornia Institute and Darling Downs Institute of Advanced Education.

* *Type 4.* (Northcott and Shapcott (Type 3B)). A study centre developed by a distance education provider on an off-campus location e.g. Capricornia Institute's Gladstone Centre, Maryborough and District Combined Higher Education Centre (Qld).

* *Type 5.* (Northcott and Shapcott (Type 3A)). Study centres which are community based e.g. Bundaberg Centre for Higher Education (Qld).

The Type 1 centre differs from Types 2 to 4 by the level and form of teaching and category of student. Types 2 to 5 centres are all used to provide distance education support, such as teleconferences or occasional tutorials, to external students. The categories are distinguished by type of location.

Irrespective of type of centre, each contains a collection of reference/library materials, at least one microcomputer, teleconferencing facilities and, with few exceptions, photocopying facilities. The reference/library collection at each centre is generally targeted for specific courses or groups of students. Where audio-visual equipment is available at a centre, it generally includes an overhead projector and in a number of instances a video tape recorder. At all study centre locations there is space for group meetings and private study and generally access to tea and coffee making facilities.

Appendix E provides summary details of facilities available in study centres used by institutions in this project.

SECTION 5

STUDENT PERSPECTIVES: QUESTIONNAIRE DATA

5 STUDENT PERSPECTIVES: QUESTIONNAIRE DATA

5.1 Aims

The broad aim of collecting the questionnaire data was to obtain information from students on the degree to which they used study centres, the nature of that use and their views on study centres as an aspect of the delivery system for distance education.

The specific aims were as follows:

* To identify the degree to which students from the different institutions used study centres.

* To determine the types of activities and facilities that students perceive to be worthwhile attributes of study centres.

* To assess the nature of communications between students and staff of their institutions, the extent of these communications, and the reasons for them.

5.2 Methodology

In order to achieve the above aims, the questionnaire contained in Appendix A was designed. It was based on a version of a questionnaire used by Dekkers and Kember (1986) and was designed in such a manner that the same questions were asked of all students from the six participating institutions. This required some questions to be made institution-specific with respect to: the method of referring to study centres used by the institution; terminology for certain practices; and staff nomenclature. The questionnaire used by each institution had a specific covering letter that was signed by the head of external studies in each institution.

5.2.1 *SAMPLE*

The population for the questionnaire use was external students from each of the tertiary sectors. The sample included external students from capital and regional city institutions.

For each institution, the following categories of students were excluded from the sample:

* students resident in the same city or town as their enrolled institution
* mixed-mode students
* interstate students.

A 66.6% random sample of students was stratified by institution.

5.2.2 *ADMINISTRATION OF QUESTIONNAIRE*

During September 1986 the questionnaires were mailed out by each of the six participating institutions to the student sample as defined above. Response to the questionnaire was voluntary and the respondent's name was not requested. A follow-up request for return of the questionnaire was not made. Response to the questionnaire is shown in Table 5.1.

Table 5.1
Response to Questionnaires by Institution

Institution	Questionnaires Sent Out	Questionnaires Received	% Response Rate
A	494	335	68
B	300	161	54
C	735	454	62
D	897	490	55
E	565	371	66
F	300	178	60
Total	**3291**	**1989**	

Statistical testing on the above data indicates that none of the institutional samples are biased samples (at $p < 0.01$ level) within the total population of students ($\chi^2 = 14.55$).

5.3 Results

5.3.1 *CHARACTERISTICS OF RESPONDENTS*

Demographic data collected through the student questionnaire included age, gender, marital status, occupation, employment status, population of the students' place of residence, students' highest qualification, current course studied and number of semesters of study completed by the student.

Full details of demographic data and a commentary on the data at the institutional level are presented in Appendix B. The demographic data for students across institutions were relatively homogeneous and a summary profile is presented in Table 5.2.

Table 5.2
Summary of Characteristics of Respondents

Description	Feature	% Student Population
Age	25 to 40 years	70
Gender (course dependent)	BEd/Arts	60 females
	Business/Science/Engineering	60 males
Marital Status	Married	75
Dependents	No Children	45
	1 to 3 Children	50
Occupation (4 main groupings)	Administrative/Clerical	10-30
	Teachers/Lecturers	10-40
	Technician/Technical	10
	Homemakers	10
Employment Status	Mainly employed	80
	Part-time employment	10
	Unemployed	10
Size of Place of Residence	Live in country cities and towns (Relatively evenly spread across towns varying in population from 1,000 to 250,000)	50-80
	Live in communities <10,000	20-50
Students Highest Qualification	Senior->Associate Diploma/Degree	20-40
	Certificate->Associate Diploma	30
	Teaching Diploma->BEd	30
	Degree/Postgraduate->Postgraduate	30
Current Course	Associate Diploma	20
	Degree	60
	Postgraduate	20
Number of mesters Completed	Completed 3 semesters of study	50-70

5.3.2 *STUDY CENTRES USED BY STUDENTS*

Students were asked to indicate the name of their nearest study centre. Table 5.3 provides summary details of study centres used by students together with an indication of the degree of access to study centres by students.

It can be seen that all institutions shared study centres with other users. Also except for one institution the majority of students were within reach of a study centre for use or study. As further demonstrated in Table 5.3 these results need to be interpreted with considerable caution as students in remote locations are known to be prepared to travel up to 500km to attend a study centre activity.

Table 5.3
Study Centres Used by Students by Institution

Institution	Number of Different Study Centres Used	Study Centres Shared With Other Institutions	% Students Too Far From Centre For Access
A	12	12	6
B	7	7	13
C	13	12	3
D	19	19	3
E	12	12	1
F	2	2	2

5.3.3 *TIME TAKEN TO TRAVEL TO NEAREST STUDY CENTRE*

It can be seen from Table 5.4 for those students in the sample who had access to a study centre that TAFE College students (Institution F) were nearly all less than 40 minutes travel time by car away from a study centre. For all the other institutions (Institutions A to E):

* 40-50% of students were within 20 minutes car travel
* 70-80% of students were within 1 hours car travel
* 10-30% of students were more than 1.5 hours car travel from a study centre.

Table 5.4
Time Taken to Travel to Nearest Study Centre

Time	% Student Response for Each Institution					
	A	B	C	D	E	F
0-10 Minutes	19	36	22	25	28	29
11-20 Minutes	19	16	22	28	20	41
21-40 Minutes	20	8	23	21	10	22
41-60 Minutes	10	7	13	8	11	3
61-90 Minutes	11	5	10	8	8	1
90 Minutes Plus	20	28	11	10	17	4
No Response	0	0	0	0	0	0

5.3.4 *NUMBER OF VISITS TO STUDY CENTRES*

Table 5.5 provides details of the number of visits to study centres by students. There are considerable differences in the results and three groupings of visits can be seen: Institution A, Institutions B to E and Institution F. This result is consistent with the time taken to travel to study centres (see Table 5.4). Students from Institution A are on the whole more remote from a study centre than students from all the other institutions and hence the high percentage of students (66%) never visited a centre. For Institutions B to E travel time and level of usage corresponds. Students at Institution F in the majority of cases are close to centres and hence the number of visits to study centres in comparison to the other institutions can be expected to be higher.

No evidence was produced to show a relationship between the number of student visits to a study centre and the type of centre i.e. Types 1 to 5 as described in Section 4. Further, caution is needed in interpreting these results as discussed in the next section as the number of visits to centres by a student can depend on many factors e.g. teaching philosophy, resources available at centre.

Table 5.5
Number of Visits to Study Centres

Number of Visits	% Student Response for Each Institution					
	A	B	C	D	E	F
Never	66	41	31	38	39	13
Once	10	17	17	11	10	13
Twice	8	9	13	12	7	17
Three Times	6	5	8	10	4	10
Four Times	3	4	4	6	4	9
Five Times	2	4	3	5	0	9
6-10 Times	4	8	12	12	16	17
11-20 Times	2	2	7	4	11	7
More Than 20 Times	1	11	4	3	3	6

5.3.5 *PREFERRED TIMES FOR VISITING CENTRES*

The times most preferred by students to attend study centres are presented in Table 5.6. The most preferred time is weekday between 68pm followed by weekday daytime. Weekend timeslots were much less popula: than weekday. Trends for the most preferred time to attend centres are common for all institutions except Institution A. Most students enrolled in this institution were teachers and this suggests the influence of occupations on time for study.

Table 5.6
Preferred Times for Visiting Centres

Time of Visit	% Student Response for Each Institution					
	A	B	C	D	E	F
Weekday daytime	6	15	12	20	18	30
Weekday 4-6pm	24	10	8	8	11	8
Weekday 6-8pm	15	24	28	35	22	32
Weekday 8-10pm	5	6	11	8	10	11
Saturday am	12	5	9	4	13	5
Saturday pm	12	9	14	8	11	5
Sunday am	4	2	4	3	2	1
Sunday pm	4	3	4	1	2	-

5.3.6 *REASONS FOR VISITING CENTRES*

Students were asked to indicate all their reasons for visits to study centres. Results presented in Table 5.7 indicate that:

* four of the six institutions have an orientation program

* the most common reason given by students from each institution was to use the library or to borrow books

- use of computers rates highly as a reason for usage by students from two institutions
- some reasons for use reflect specific instructional/communication modes between the student and the institution, for example use of tutorials by Institutions A and C; teleconferences by Institution D; place to collect study materials by Institutions E and F; course advice by Institution F
- there is little demand to use study centres for the following activities: use of audio-visual equipment; viewing videos; private study; to meet with visiting staff (except Institution C).

Table 5.7
Reasons for Visiting Centres

Reason for Attendance	% Student Response for Each Institution					
	A	B	C	D	E	F
Attend orientation meeting	2	3	28	34	16	12
Attend tutorial presented by a local tutor	1	1	6	2	18	13
Attend a tutorial by your lecturer	33	2	21	4	8	8
Attend a meeting with a visiting lecturer	1	4	11	0	5	0
Attend a teleconference	1	0	5	34	5	0
Take part in a satellite conference	1	0	0	4	0	0
Use the computer	1	4	18	21	1	1
Do photocopying	4	8	5	8	12	14
Use audio-visual equipment	0	1	0	1	1	3
View a video	0	1	1	3	0	1
Private study	5	6	5	8	9	14
Use the library	20	23	17	18	37	30
Borrow library books	23	18	14	14	42	29
Collect study materials	6	4	4	6	15	42
Seek course advice	2	7	6	2	7	47
Other	2	3	10	2	4	8
No response	5	0	0	0	0	0

5.3.7 *EVENTS AND FACILITIES AT CENTRES*

Tables 5.8(a) and (b) present details of student perceptions of the worthwhileness or otherwise of a number of events and facilities at study centres. The following key has been used:

3 = >75% of students rated the item as worthwhile or very worthwhile

2 = 50-74% of students rated the item as worthwhile or very worthwhile

1 = an even spread of student opinion ranging from very worthwhile to definitely not worthwhile

0 = >50% of students rate the item as probably not worthwhile and/or definitely not worthwhile

It can be seen that there is considerable unanimity of student perception concerning the worthwhileness of events and facilities at study centres. Events that rate most worthwhile are those involving academic or student contact. Administrative matters did not rate as worthy of a visit to a study centre.

With respect to use of resources the borrowing and use of library books rates as a very worthwhile reason for visiting study centres. All other types of resources that may be available e.g. A-V equipment, photocopier do not rate as being very worthwhile.

With respect to facilities at study centres, students appear to be seeking facilities that have the following features:

* close to home and has night lighting/security and parking space
* staffed at all times (including evenings and weekends)
* a range of communication facilities and a computer
* library resources
* amenities for private study and rest.

Table 5.8(a)
The Worthwhileness of Events at Study Centres

Event	Student Rating of Worthwhileness of Events by Institution					
	A	B	C	D	E	F
To attend orientation meeting	2	2	2	2	2	2
To attend tutorial by lecturer/ course writer	3	3	3	3	3	3
To attend tutorial by local tutor	3	3	3	3	3	3
To attend teleconference/satellite programme	3	2	2	3	2	1
To use the computer1	1	1	2	2	1	2
To borrow library books	2	2	2	2	2	3
To read library books	2	2	1	1	2	2
To use a library catalogue	2	2	2	1	2	2
To use audio-visual equipment	1	1	1	1	2	2
To do photocopying	1	1	0	0	1	1
To do private study	0	1	0	0	0	1
To have a study group meeting with other students only	2	2	2	2	2	2
To receive counselling before deciding which course or subjects › enrol in	0	2	2	2	2	3
To complete application forms	0	0	0	0	0	2
To complete re-enrolment forms	0	0	0	0	0	2
To seek advice about administrative requirements of institutions	1	1	1	1	1	2
To attend a study skills course	1	2	2	2	2	2
To attend a social function	0	1	1	0	1	0

Table 5.8(b)
The Worthwhileness of Facilities at Study Centres

Facility	Student Rating of Worthwhileness of Facilities by Institution					
	A	B	C	D	E	F
Night lighting/security	2	2	2	2	2	2
Parking space	2	2	2	2	3	2
24 hour access to facilities	1	1	2	2	0	1
Microcomputers	2	2	2	2	2	2
Photocopiers	2	2	2	2	2	2
Access to staff during office hours	2	2	2	2	2	3
Staffing in the evening and at weekends	3	2	2	2	2	2
Within .5 hr from home	3	3	3	2	3	2
Teleconference facilities	2	2	2	2	2	1
Facsimile machine	2	1	2	2	2	1
A terminal for sending electronic mail	2	1	2	2	2	1
Library catalogue	3	2	2	2	3	2
Library books covering each subject	2	3	2	2	3	3
A place for private study	2	2	2	2	2	2
A place that has tea/coffee making facilities	2	2	2	2	2	2

5.3.8 *NUMBER OF CONTACTS WITH CENTRE STAFF*

Table 5.9 presents details concerning the extent to which students have communication with study centre personnel. Institution A does not have study centre personnel and hence has been omitted from the Table. There is no apparent pattern in the level of contact in the other institutions which can be seen as a reflection of institutional philosophy regarding study centre use. However, in all instances the extent of contact for those students who do make one or more contacts is relatively small.

Table 5.9
Number of Contacts with Centre Staff

Number of Contacts	% Student Response for Each Institution				
	B	C	D	E	F
No contact	73	60	9	30	7
One contact	12	14	16	16	9
Two contacts	3	11	22	22	21
Three contacts	3	6	15	10	8
Four contacts	3	3	10	10	15
Five contacts	3	2	8	6	4
Six contacts	0	1	6	3	10
Seven contacts	1	1	1	0	3
Eight contacts	0	1	4	0	7
Nine contacts	0	0	1	1	1
Ten or more contacts	2	4	7	3	18

5.3.9 *FORMS OF COMMUNICATIONS BETWEEN STUDENTS AND INSTITUTIONS*

Table 5.10 provides details of the type of communication with which students feel comfortable. The following key has been used:

3 = >75% of students are very comfortable or comfortable with the form of communication

2 = 50-74% of students are very comfortable or comfortable with the form of communication

1 = a relatively even spread of student opinion ranging from very comfortable to not comfortable with the form of communication

0 = >50% of students not comfortable with the communication

Clearly there is a vast unanimity among students from institutions concerning each form of communication. It is evident that students are very comfortable with conventional forms of communication but less so with modern forms of telecommunications (i.e. electronic mail via computer and facsimile). Approximately 25% of respondents did not know or had no experience with these forms of communication.

Table 5.10
Forms of Communication between Students and Institutions

Form of Communication	**Student Rating of Level of Comfortableness With Different Forms of Communication by Institution**					
	A	**B**	**C**	**D**	**E**	**F**
Face-to-face	3	3	3	3	3	3
Personal written correspondence	3	3	3	3	3	3
Telephone, one-to-one	2	3	3	2	3	3
Telephone with several parties	3	3	2	3	2	0
Face-to-face in a group	2	2	2	3	2	1
Electronic mail via computer	1	1	1	1	1	1
Facsimile mail via FAX machine	0	1	2	1	1	1

5.3.10 *NUMBER OF CONTACTS WITH DIFFERENT INSTITUTIONAL STAFF*

Table 5.11 provides details of reasons for student contact with different institutional personnel.

The following key has been used:

4 = >75% of students made 1 or more contacts for the particular item

3 = 50-75% of students made 1 or more contacts for the particular item

2 = 25-49% of students made 1 or more contacts for the particular item

1 = Less than 25% of students made contact for the particular item

0 = activity not carried out

It would appear from the results that both the nature and level of contacts reflect institutional teaching philosophy. Except for Institution D the level of contact with the institution is relatively low.

Table 5.11
Number of Contacts with Different Institutional Staff

Reason for Contact	% Student Response for Each Institution Number of Contacts					
	A	B	C	D	E	F
Study Centre Personnel						
Enrolment	1	1	1	3	2	1
Orientation	1	1	1	1	2	0
Mailing of study materials	0	0	0	3	1	2
Telephone/satellite tutorials	1	0	1	4	1	0
Academic query	1	0	1	2	1	1
Assignment extension	0	0	0	2	0	1
Computer in study centre	0	0	1	3	0	0
Computer managed learning	0	0	0	2	0	0
Residential school	0	0	0	2	2	0
Textbooks	1	1	1	1	2	1
Library books	1	1	1	1	2	1
Study centre use	1	1	1	2	1	1
Examinations	1	0	1	2	2	1
External Studies Department						
Enrolment	3	1	1	3	3	1
Orientation	1	1	1	1	1	0
Mailing of study materials	3	1	1	2	3	2
Telephone/satellite tutorials	1	1	1	1	1	1
Academic query	2	1	1	2	2	1
Assignment extension	2	1	1	2	1	1
Computer in study centre	0	0	0	1	0	0
Computer managed learning	0	0	0	2	0	0
Residential school	0	0	1	2	2	0
Textbooks	1	1	1	2	2	1
Library books	2	2	1	2	2	0
Study centre use	1	1	1	0	1	1
Examinations	1	0	1	3	1	2
Lecturer						
Enrolment	1	1	1	3	2	3
Orientation	1	1	0	1	0	2
Mailing of study materials	2	1	1	2	2	1
Telephone/satellite tutorials	1	1	0	2	1	1
Academic query	3	3	3	3	2	2
Assignment extension	3	0	2	2	2	1
Computer in study centre	0	0	0	1	0	0
Computer managed learning	0	0	0	1	0	0
Residential school	0	0	1	2	2	0
Textbooks	1	1	1	1	2	1
Library books	0	0	0	1	1	1
Study centre use	0	0	0	0	0	0
Examinations	1	1	2	1	1	1

5.3.11 *TIMELINESS AND CONTENT OF REPLIES FROM INSTITUTION*

Table 5.12 presents details of student satisfaction regarding the timeliness and content of replies from institutions. The results indicate an overall satisfaction with the timeliness and content of replies to students. Variations with the degree of satisfaction can be contributed to institutional variations in roles and emphasis of different support services.

Table 5.12
Timeliness and Content of Replies to Student Enquiries

	% Student Response for Each Institution Extent Students are Satisfied					
	A	**B**	**C**	**D**	**E**	**F**
Timeliness						
Centre Officer	65	41	50	70	68	65
External Studies Dept.	69	42	54	42	72	64
Lecturer	59	38	61	41	63	59
Content						
Centre Officer	65	29	47	66	66	67
External Studies Dept.	70	44	58	50	72	64
Lecturer	60	43	63	48	62	69

SECTION 6

STUDENT PERSPECTIVES: INTERVIEW DATA

6 STUDENT PERSPECTIVES: INTERVIEW DATA

6.1 Aims

The purpose of conducting the interviews was to flesh out information obtained from the Student Questionnaire and to compare the interview responses with those obtained in previous studies. It also provided the opportunity to explore in greater depth the attitudes and perceptions of external students towards various methods of communication ranging from face-to-face, one-to-one contact to communication via the various technologies that are now available. In summary, the researchers were interested in the attitudes and perceptions of students towards external studies as a mode of study, their evaluation of the services and facilities provided by their institutions, and their preferred method of communication with other students and staff of the institution in which they were enrolled.

The interview schedule sought information on the following:

* commitments other than external study
* stage reached in study program
* gender
* previous experience as an on-campus student
* reasons for studying externally
* advantages and disadvantages of external study
* study materials received by students
* contact with lecturers and other staff of the institution
* type of communication preferred
* preference for dealing with the main campus compared with regional centres
* contact with others outside the institution
* attitudes towards using technology for communication
* personal value of external study

6.2 Methodology

6.2.1 *SAMPLE*

A random sample, stratified by institution, was selected for interview: 1.25% of students were selected from students enrolled in all institutions except Institution D where the sample was 0.625%.

This gave a total target sample of 81 students and it was expected that approximately 60 students (75% of the target sample) would eventually be available for interview.

6.2.2 *INSTRUMENT*

An interview schedule was devised (see Appendix C) which covered the specific areas listed above as well as eliciting information from students on selected aspects of their background and experience.

6.2.3 *CONDUCT OF INTERVIEWS*

Interviews were conducted by telephone over the period September to November 1987. In some cases students agreed to complete the interview schedule in writing rather than be interviewed. The same researcher conducted all the interviews except in the case of Institution F which was unable to release details of its students to outside institutions and elected to conduct its own interviews using the same interview schedule.

Telephone interviews were recorded and transcribed to provide a complete account of the responses.

6.3 Results

6.3.1 *RESPONSE RATE*

Responses to the request for interview are shown in Table 6.1.

Table 6.1
Responses to Interview Requests by Institution

Institution	Target Sample N	Respondents N	Respondents %
A	9	9(2)	17
B	8	6(2)	12
C	18	11(3)	21
D	16	13(5)	25
E	15	8(1)	15
F	15	5(4)	10
Total	**81**	**52(17)**	**100**

Respondents who completed the interview schedule in writing rather than by telephone are shown in brackets.

The low participation rate of students from Institution F was due to the difficulty which the staff there encountered in arranging interviews. Eventually one interview was conducted by telephone and the remaining 14 students were sent the interview schedule. Four of these students completed the schedule in writing. It follows then that the sample of respondents was biased towards the other institutions.

6.3.2 *GENDER*

Of all interviewees, 18 (35%) were female and 34 (65%) were male. Distribution by institution is shown in Table 6.2 below.

Table 6.2
Distribution of Gender of Interviewees by Institution

Institution	Gender		Total	% Males
	Males	Females		
A	5	4	9	56
B	5	1	6	83
C	10	1	11	91
D	9	4	13	69
E	3	5	8	38
F	2	3	5	40
Total	**34**	**18**	**52**	**65**

We note that the percentage of male respondents was considerably higher than that of females at Institutions B and C, reflecting perhaps the technological orientation of these institutions.

6.3.3 *PERSONAL COMMITMENTS*

Students were asked to describe their personal commitments in addition to their commitment to external studies: employment, family, social, community, sport, other study, and so on. Results are shown in Table 6.3.

Table 6.3
Personal Commitments of Students

Type of Commitment	N responses	% total responses	% total students surveyed
Employment (full or part-time)	46	36	89
Family (married with or without dependents)	34	26	65
Social	18	14	35
Community	4	3	8
Sport	22	17	42
Other Study	2	2	4
Other	3	2	6
Total responses	**129**	**100**	

Clearly students have a high level of commitment in terms of their employment and family responsibilities in addition to their external study but a rather low level of commitment to other activities.

The researchers were also interested in whether males and females were different in their patterns of outside interests. Overall a higher percentage of males than females were in some kind of employment and a higher percentage of males had family responsibilities but they were also more likely to engage in sport and community activities than females.

6.3.4 *STAGE REACHED IN STUDY PROGRAM*

Students were asked what stage they had reached in their study program. (Responses were not available for Institution F on this question. Overall, 68% of respondents were in the first two years of their course, 11% were in the third year, 15% in the fourth year and 6% in fifth or subsequent years.

Comparable data for the Student Questionnaire responses were 61%, 16%, 9% and 14% respectively.

6.3.5 *ON-CAMPUS EXPERIENCE*

Students were asked whether they had ever studied on-campus. Results for students from Institutions A to E are shown in Table 6.4. (Results were not available for Institution F students on this question.)

Table 6.4
On-Campus Experience

Level of Experience	Institution A		B		C		D		E		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
No experience	1	11	4	67	5	46	9	69	3	38	22	46
Experience	8	89	2	33	6	54	4	31	5	62	25	54
Total	9	100	6	100	11	100	13	100	8	100	47	100

Overall 47% of respondents had never studied on-campus. There were marked differences between institutions however. Only 11% of students in Institution A had never studied on-campus compared with 69% of students in Institution D.

Those students who had experienced on-campus study, were asked to describe their experiences in more detail and also whether they thought that on-campus was a good way to study. Twenty out of the 25 students who had studied on-campus showed a preference for this mode of study because of the opportunities it provided to interact with lecturers and with other students and because of ease of access to resources and facilities on-campus. Overall it seems to be a more enjoyable way to study, but in some cases so enjoyable socially that it was difficult to get down to study. Some students commented that their immaturity at the time detracted from the effectiveness of their learning on-campus.

6.3.6 *REASONS FOR STUDYING EXTERNALLY*

Students were asked how it came about that they were enrolled as an external student. A variety of reasons were given: a career requirement; to upgrade existing qualifications or to complete a degree; to retrain; too remote or isolated from a campus; couldn't afford to attend full-time; personal fulfillment.

This question was followed by a request for an evaluation of what was liked best and liked least about external study. Almost all respondents were able to take a balanced view, weighing up the pros and cons. Their responses are summarised in Table 6.5.

Regardless of institution, all respondents appreciated the opportunity to study according to their own schedule and to study while remaining in the workforce and maintaining their incomes.

On the negative side, however, students were aware of the lack of contact with lecturers and other students and experienced feelings of isolation. They also missed easy access to the resources of institutions, library resources, for example. Several complained that their courses took too long to complete which is as much a feature of part-time study as it is of external study. Others found it difficult to motivate themselves and many would have valued more support from their institutions in various ways.

Students were then asked to express their preference for the following modes of study if they could undertake them: on-campus full-time; on-campus part-time; external only; mixed-mode i.e. some study on-campus and some external.

Table 6.5
Advantages and Disadvantages of External Study

Institution	Advantages	N	Disadvantages	N
A	You can study according to your own schedule	4	Isolation	4
			Course materials problems	2
	Allows full-time employment	1	Time pressures	2
	Makes for interest in profession	2		
	Compatible with work	3		
B	You can study according to your own schedule	5	Isolation	5
			Easily distracted	1
			Frustration of solving problems alone	3
C	You can study according to your own schedule	6	Lack of access to resources	2
			Isolation	5
	Allows full-time employment	2	Attitudes of lecturers	1
	Portability	1	Timeliness of replies	1
	Caters for life-style	1	Amount of reading	1
			Course duration	2
	Consideration by lecturers	1	Problems with materials	1
			Assignments clash with work	1
D	You can study according to you own schedule	8	Isolation	8
			Slow progress	1
			Lack of support from institution	1
	Maintain job and income	3	Problems with motivation	3
			Access to study resources	1
			No tutorials	1
E	You can study according to your own schedule	6	Isolation	7
			Missing lecture notes	1
			Lack of access to library facilities	
F	You can study according to your own schedule	5	Isolation	3
			Course duration	1
			Lack of technical support	1

Fifty per cent of the students would have studied full-time if they had the opportunity, 31% showed a preference for mixed- mode study, 12% for part-time study on-campus and 8% for external study only.

The preference for full-time study is understandable in view of the student desire to finish qualifications in a shorter time frame, particularly where reasons for studying are career-related. Mixed-mode study would presumably minimise feelings of isolation while allowing students the freedom to maintain their own schedules to some extent. It is interesting to note, though, that very few students opted for external study as their preferred mode of study.

When asked to comment on their choice of mode, those who opted for full-time study emphasised the opportunity to complete their courses more quickly, to have contact with other students and with lecturers, to access resources for learning and to be totally committed to their study. Some said it was a more enjoyable way to study or that it was 'just a better way!'.

Responses given by students are shown below to illustrate the different perceptions of students who preferred the different modes of study.

Full-time study preferred

It's more helpful than external study.
You have interaction with students on a one-to-one basis.
There is a large range of tutors.
It's done quicker and you make friends through your fellow students which carry over into the business world.

Cost, access to tutors, campus life, timeliness of completion.
The commitment to study by the external mode is extremely demanding for me.

With full-time study you have less frustration and greater access.
External studies takes a lot longer to get the degree, full-time is a lot quicker.
There are more opportunities to understand the work itself, better access to materials.

External studies is a last resort.
On-campus is easily the most effective and enjoyable way to study.
Without a shadow of doubt it has to be the best way to study.

Timeliness of completion.

I like to be an active participant in the learning process, not a passive one.

Speed, availability of resources, lectures, student contact.

On-campus is a preferable method of tertiary education, particularly access to reference material and other students.

By undertaking full-time study you can devote all effort to the subjects.

Completion and enjoyment of campus life.

On-campus is far superior to external study from the point of view of interaction with other students and involvement with tutors and lecturers.

A good life.
To get the degree over and done with.

Being able to devote full attention to a chosen field of study, access to lecturers, common bond amongst students.

The ability to quiz a lecturer face-to-face on a point compared to having a one week residential school means that on-campus is much easier.

Quicker, access to all facilities and staff/resources, in general.

A range of facilities like libraries, computers, interaction with other students and lecturers.

Because I think you can devote your attention to it and get a much better sequence and balance.

To get it over and done with quicker.

You can apply yourself 100% whereas with part-time or external study it's only a small part of your other commitments.

Prefer face-to-face.
Technology makes it much easier but not as personal.

Part-time on-campus

More student-lecturer contact and you develop a better relationship rather than talking over the phone.

I like the idea of contact with lecturers plus also studying at home.

Face-to-face contact with lecturers.
Access to materials.

On-campus I'd find the contact with the lecturers would be much better.

I would like to attend at least once a week to communicate with my tutor.

Mixed-mode study

Allows for private study plan but some attendance at some lectures would be beneficial.

Back up of on-site lecturers would, or I imagine it would, make some units easier than studying externally.

The social interaction plus the external studies program doesn't offer any practical material.

Prefer to have other students to communicate with about problems and difficulties.

I don't have enough contact with my lecturers.

I like doing it myself the majority of the time but I would like contact with lecturers in tutorials.

Vacation school experience is extremely valuable.

On-campus work is very important. That contact is very important but it's also good to work at your own pace and set your own limits and your own study schedule.

I'd like to have a bit more face-to-face contact.

Because I'm doing science I'd rather do lab work once per week than spend school holidays in a lab 14 hours a day.

You need that contact with lecturers.

You do need some sort of contact with your lecturer at some time during the course, but being able to study when I want is very appealing.

You could mix the technical support with private study to improve learning.

Wholly external

I feel I belong the way they treat me. I have no problems at all. If I have they are very friendly and the problem is sorted out.

I learn from books not from a classroom. The book is the lecturer.

From the foregoing it appears that the mixed-mode students saw it as providing the best of both worlds: they could plan their own study schedules and still have support in their study. Those who opted for part-time study did so in order to have contact with lecturers and other students and to have access to resources.

Those students who chose external study emphasised the importance of maintaining their current lifestyle and in one case "because I learn from books, not from a classroom".

It is clear from these responses that in spite of the stated advantages of external study, it is not a preferred way to study overall: students feel that they need contact with lecturers and other students and the ready access to resources which an institution can offer. This is apart from a desire to complete their courses as quickly as possible by full-time study.

6.3.7 *PERSONAL VALUE OF EXPERIENCE AS A STUDENT*

Students were asked about the personal value of their study - apart from the qualification they were getting. Did they feel that it was a worthwhile experience overall?

Forty-eight (92%) replied in the affirmative, two students were undecided and two did not think it was a worthwhile experience.

Comments made on the positive side reflect the sense of achievement in attaining a qualification, a new lease of life professionally, feelings of being a more useful member of society, meeting worthwhile people at residential schools.

On the negative side some students felt that the competition with their other commitments was too great to justify studying.

6.3.8 *EVALUATION OF STUDY MATERIALS*

In the first instance students were asked about the study materials that were supplied to them as an external student by their institution. Specifically they were asked what kinds of study materials were sent to them in semester one 1987.

All respondents received printed materials of some kind, which may have consisted of subject outlines, study guides, workbooks, lecture notes, reprinted readings, past exam papers, revision and assignment questions. In addition, 37% of students received audiotapes, 4% received videotapes and 8% received computer diskettes. Clearly the courseware provided is largely print-based.

They were also asked how important the study materials were compared with other experiences such as face-to-face lectures in study schools, weekend seminars, tutorials, talks with other students, materials which they found for themselves and so on.

All students responded that the study materials were very important to them but there were some qualifying remarks:

> They were helpful but not as helpful as the actual contact.
>
> Helpful, especially the tapes which pointed out main points in the lecture notes...
>
> Some of the questions were very open-ended. When you write an assignment you haven't got that contact, you have to ask exactly what they do want and I know of other students who have gone to the trouble of preparing assignments and they have been totally off the track of what they are supposed to be doing.
>
> Weekend seminars and tutorials are much more beneficial, as I sometimes find it is hard to pick out what is and what isn't relevant to course materials.
>
> Good but no comparison with lectures.
>
> Better than tutorials as lecturers tend to rush what they are trying to get across to you.
>
> Extremely important as they are the source of initial information but effect can be diminished by mistakes, poor proof reading etc.
>
> Would dearly love to have video lectures etc.
>
> Notes have been very good so far, except on one subject. I have had problems with where they hadn't revised part of the notes and the course structure has changed slightly, it dropped me back in the subject.

6.3.9 *COMMUNICATION WITH STAFF*

Students were asked whether they had any contact at all with their lecturers in their first semester subjects. Of all respondents, 79% said that they had contact with their lecturers.

Those students who had no contact at all said this was because they had no need (46%), that the written information was sufficient (9%), that they had assistance from their local college (9%), that they were unable to leave their home (9%), that the lecturer was hard to contact (9%) or that they couldn't communicate with the person (9%). One student gave no response (9%).

They were then asked who initiated the contact: the student, the lecturer or a bit of both. In 71% of cases where contact occurred the student initiated contact, in 17% of cases the lecturer initiated contact and in 12% it was a bit of both.

The researchers were also interested in methods by which students communicated with their lecturers. A variety of methods was mentioned and some students used more than one method. Of all methods mentioned 48% of contact was made by telephoning in a one-to-one situation; 20% was tutorials in a residential school or other tutorial situations; 19% of contact was by letter; 5% in a face-to-face one-to-one situation; 2% by electronic mail; 3% by FAX and 3% in a telephone tutorial.

All students were then asked which kind of communication with their lecturers they would feel most comfortable with given the way that they usually like to communicate with people. Some students gave more than one preference.

A total of 61% of preferences was for face-to-face situations with 40% preferring face-to-face one-to-one situations and 21% preferring face-to-face encounters, but in a tutorial or lecture. A further 11% of preferences was for one-to-one telephone calls and 10% for written correspondence. Teletutorials were preferred by 8%, 3% preferred electronic mail and 7% opted for all methods of communication. So although the methods of communication most used were telephone, tutorials and letter, the actual preference of the whole group was for face-to-face contact.

Results of the Student Questionnaire indicate that students are very comfortable with conventional forms of communication such as face-to-face, telephone and written correspondence but less comfortable with using technology for communication.

Students were asked whether they felt that their lecturers are in general remote and distant from them, or people who are friendly and easy to deal with. Fifty-four per cent said they saw their lecturers as friendly and easy to deal with, 15% said they were remote and distant and 31% said that it varied either according to the lecturer or the way they felt at the time or the way in which they encountered the lecturer.

They were also asked whether there were other people in the institution with whom they had contact. Librarians were the group with whom the external students had most contact apart from their own lecturers. Twenty-nine per cent said that they contacted librarians and all claimed that this contact was very useful to them. Smaller numbers had contacted counsellors, administrative staff, other lecturers, exam coordinators, tutors.

Students were asked whether they had any preference for dealing with staff on the main campus compared with staff at study centres. Thirty-four per cent said they would prefer to deal with staff on the main campus for a variety of reasons:

> They would understand the exact problems I am having...
>
> The only problem I have had can only be answered by the lecturer.

Experiences have shown me in the past that where you have middle men you often end up in a situation of misunderstanding and basically all they do is relay messages.

Regional staff aren't really geared up for the subjects.

On one occasion I rang up the regional centre and they had no idea whatsoever.

You can speak to the lecturer involved.

By talking directly to my lecturer we both know where we stand.

Staff on the main campus can tell you what you want to know whereas regional staff are only somewhat of a help.

If I want something in a hurry I contact the Institute myself.

First hand knowledge.

For these students then it is the ability to get accurate information quickly that is important and they prefer not to deal with study centre staff who may not be able to supply this information. However 12% said they would prefer to deal with study centre staff because they were more accessible than campus staff. The remainder had no preference.

It seems then that there is a problem with accessibility to staff on campus but that they are perceived as having first hand knowledge. Regional staff may be generally more accessible but may not be able to give the kind of assistance that is required.

6.3.10 *USE OF REGIONAL SERVICES*

Sixty-two per cent of respondents had contact of some kind with a local study centre during the first semester of 1987. Of this group 59% initiated contact with the centre. In 16% of cases the contact was initiated by a regional officer and in the remaining cases contact was initiated by either the student or someone in the centre at different times.

The kind of contact made was a mixture of visits to the centre, telephone contact or correspondence. Only 63% of those students who made contact with a centre actually visited it in person. (For the Student Questionnaire data, 62% of all respondents said that they had visited a centre in person during the year.)

People seen or contacted in the centres were librarians, regional staff or other students and occasionally tutors or visiting lecturers. Most students said that the people they contacted in the centres were helpful and friendly but surprisingly few said that they had developed a strong sense of identity with the centre - rather it was just a place to visit when they had to. Only 17% of all respondents said they had developed a sense of identity. Reasons for not feeling any identity with the centre were basically that there was no opportunity for a bond to develop, that materials and assistance of the kind required were not available, that the centre had no identity, that it was a centre for another institution, that it was just a library, not a place where social interaction occurs.

For the questionnaire data the most common reason for visiting a centre was to use the library or borrow books.

Timing of visits to centres was often associated with the times when assignments were due or exams were coming up: 53% of students who visited went at this time. Some visited regularly (13%) and the rest irregularly.

Students were then asked what were the main things that they would look for in a centre that would make it a desirable place to visit. The range of responses provided by students is summarised below:

* a good library with approachable staff and good up-to-date reference materials
* opening hours that provided good access to the centre
* security
* counselling staff to advise on academic planning
* people to talk to
* convenient location
* tutorials and teletutorials
* access to computer terminals
* a degree of comfort and adequate space in the centre.

These responses paralleled what students thought were the major problems with the study centres they were currently using.

Results of the interviews indicate that activities or events that rate as worthwhile were those involving academic or student contact while administrative matters did not rate highly as worth a visit to the centre. The use of resources, with the exception of library books, had mixed ratings by students.

6.3.11 *ATTITUDES TO TECHNOLOGY*

The interview proceeded to a discussion of methods of communication in general and in particular to use of technology for communication versus more immediate face-to-face communication.

In the first instance, students were asked to talk about their feelings regarding the various kinds of technology that are now being used for communication and for study purposes: things like computers, electronic mail, teletutorials, facsimile machines and so on.

All but three of the 52 respondents said that they felt quite comfortable with use of technology for study purposes. The three who disagreed said that they felt more comfortable with face-to-face contact. Likewise all but three said that they thought technology would make external study easier for people in the future.

We note, however, that few students were actually using technology for communication (contact with lecturers) and a high proportion had already expressed a preference for face-to-face contact.

SECTION 7

COST OF STUDY CENTRES

7 COST OF STUDY CENTRES

7.1 Aims

This part of the study was designed to complement the study of student perception of usage of study centres and to furnish data on their costs. More specifically this part of the study has the following aims:

* To quantify the costs of study centres and, via utilisation of student usage data, to compute unit costs of such operations.

* To seek institutional perception of purposes and usage of study centres.

* To ascertain whether use of TAFE centres is a cost effective way of providing study centres in Australia.

7.2 Methodology

In order to achieve the above stated objectives, the questionnaire contained in Appendix D was designed. It was circulated for comments to the participating institutions, further refined and then despatched to these six organisations and other tertiary education institutions (including TAFE) known to be utilising study centres throughout Australia. Responses received are summarised in the following sections.

The six participating institutions (not all supplying cost data which were comprehensive enough to be useful in the study) have been described in a previous section of this report. Four other tertiary institutions provided information. Institution G is a regional College of Advanced Education. Institution H is a major state-wide TAFE provider of external studies and furnished data on one of its study centres. Institution I is a regional College of Advanced Education with a significant proportion (over 50%) of its enrolments in distance education programs. Institution J is a regional University provider of external studies.

7.3 Results

7.3.1 *ACTUAL OBSERVED STUDY CENTRE COSTS*

Part 2 of the questionnaire sought data on study centre costs, student numbers and staffing at the different types of study centres as described in Section 4. Study centre costs were divided into two categories as follows:

* "Direct Costs" which represent expenditure items for study centres that have been specifically budgeted for that purpose or which are identified by a separate account code

* "Non-direct Costs" which are generated by expenditure items that have not been costed in the accounting system to the study centre as a separate cost item.

Respondents were asked to apply the concept of 'absorption costing' (Rumble, 1986) in relation to non-direct activities by prorating (proportioning out of costs) such costs to study centres on an appropriate basis, for example, salaries on the basis of equivalent full-time staff, facilities costs on the basis of building space and so on. Only four institutions were able to provide full information using this method, suggesting that this form of activity costing may be a useful theoretical conceptualisation but not one which is capable of easy implementation.

In addition to the problems associated with the inclusion of non-direct costs, all institutions appear to have had difficulties in adequately quantifying equipment and building costs. Typical of the nature of problems encountered by respondents in quantification of facilities costs is the following case:

> The furniture and equipment provided for the study centre was not specifically purchased for that purpose, rather excess furniture etc. from other parts of the (TAFE) campus was re-located to the study centre. Hence no accurate costing can be provided for such items.

In view of the foregoing, no meaningful analysis could be undertaken in the study of equipment and building costs of study centres and only recurrent costs can be considered with any degree of confidence in the data provided.

The study centre recurrent costs of the four institutions which provided expenditure data on direct and non-direct costs will be considered. Table 7.1 specifies the recurrent cost per student enrolment (the number of external students who are potential users of the centre or who reside within the study centre region) by type of study centre as follows:

Table 7.1
Recurrent Unit Cost of Study Centres in 1986

Type of Centre	Unit Cost ($ per student) Institution				Average Cost ($)
	C	D	F	G	
TAFE institution (Type 2 centre)	50	31	245	63	97
Main Campus of CAE or Univ (Type 3 centre)	62	52	N/A	15	40
Developed off campus by higher education (Type 4 centre)	153	41	N/A	N/A	(97)
Community based (Type 5 centre)	60	24	N/A	62	49
Average	69	34	(245)	47	

Disregarding the data for study centres developed off campus by a higher education institution (since the sample size is only two), Table 7.1 suggests that the average recurrent unit costs of study centres varies from $40 per student for a study centre located on the main higher education campus to $97 per student for a TAFE study centre. There is a large variation in study centre unit cost between institutions, indicating that some caution must be exercised in any interpretation of these data. It is observed that Table 7.1 does not indicate that TAFE study centres are necessarily any cheaper than the other types, suggesting that any move in this direction cannot be justified on economic grounds alone. This may be justified, however, in terms of capital costs if "free" space is available on the TAFE campus.

It is noted that Institutions G and D sustained significantly lower study centre unit cost. Institution G places greater emphasis on residential schools than study centre activities, particularly, in respect of academic delivery functions.

Due to a degree of substitutability of expenditure on study centres and expenditure on residential schools, any future distance education cost studies should examine the nature and extent of this inter-relationship between study centre and residential school costs. Further, Institution G submitted the following additional information in support of its strategy to balance usage of study centres and residential schools to obtain an optimal mix:

* Residential schools were generally undertaken during weekends and vacation periods thus increasing efficiency of utilisation of building spaces.

* Institution G has undertaken student surveys of residential schools and has found great satisfaction with the program.

* Although residential schools are not compulsory at Institution G nearly 55% of the enrolled students attend.

Any future comparative study of residential schools and study centres should also consider capital costs and relative effectiveness of the two strategies.

Table 7.2 summarises the proportion of salary and non-salary recurrent costs of study centres. It shows that on the average, salary costs constitute 69% of study centre costs. It is hence concluded that study centre functions are relatively labour intensive, that is, staff/student interactions appear to be very important, particularly, in Institutions F and G.

Table 7.2
Composition of Study Centre Costs 1986

Institution	Percentage of Total Costs ($)	
	Salary	Non-salary
C	53	48
D	51	49
F	83	17
G	90	10
Average	**69**	**31**

Table 7.3 summarises the proportion of recurrent costs in salaries within Institution G for the different types of study centres. Again all types of centres are relatively labour intensive with no large observed variation in the percentage of salary costs.

Table 7.3
Distribution of Costs by Type of Study Centre 1986
within Institution G

Centre	Percentage of Salary Cost ($)
Type 2	94
Type 3	90
Type 4	N/A
Type 5	85

As stated previously, only limited institutional responses were obtained on total recurrent costs of study centres hence indicating the need for some caution in any interpretation of the resulting data. However, four other institutions provided some data on direct recurrent costs of study centres, thus increasing sample size from four to eight institutions. These direct recurrent costs can thus be considered with a view to validating some of the conclusions reached with the analysis of total recurrent costs above.

Table 7.4 below specifies the direct recurrent costs per student of study centres for the eight responding institutions. Although the gross sample size has been doubled from the previous analysis of total recurrent costs (see Tables 7.1 to 7.3), Table 7.4 indicates an effective sample size of 4 for the different types of study centres, except for a centre where conventional teaching is offered (Type 1 study centre) where only one response was achieved. Hence the following conclusions from that data should be regarded as being tentative and subject to confirmation by a more comprehensive future study:

* on the average, study centres developed by a distance education institution off-campus appear to be the most expensive in terms of direct recurrent unit costs

* community based study centre sustained the lowest direct recurrent unit cost

* unit costs of study centres located in TAFE institutions or the main campus of higher education institutions are approximately equal

* the coefficient of variation (the ratio of standard deviation to the mean and as such permits comparison of the variability of two or more data sets) indicated large variability in unit cost of study centres of Types 2 and 3, suggesting a greater need for further research of costs appertaining to such centres.

Table 7.4
Direct Unit Cost of Study Centres 1986

Institution	Cost per Student ($) in Each Type of Study Centre				
	1	2	3	4	5
C	N/A	34	52	122	43
D	N/A	26	28	35	20
E	N/A	N/A	N/A	151	81
F	N/A	152	N/A	N/A	N/A
G	N/A	54	13	N/A	54
H	N/A	N/A	190	N/A	N/A
I	N/A	N/A	N/A	152	N/A
J	46	N/A	N/A	N/A	N/A
Mean	N/A	66.4	71.6	143.0	49.5
Coefficient of Variation		0.87	1.15	0.48	0.51

The above data then suggests that direct recurrent costs of study centres can be minimised by utilisation of existing facilities and structures (as is the case with study centre Types 2, 3 and 5) rather than developing separate facilities (Type 4 study centre). Whether this difference in costs would be reflected in total recurrent unit costs of study centres is unresolved and should be a subject of future investigation.

7.3.2 *INSTITUTIONAL PERCEPTIONS OF STUDY CENTRE USAGE*

The study centre questionnaire sought data on institutional perceptions of the expected use of study centre facilities. Usage was measured using a four point scale ranging from 1 (very heavily used by students) to 4 (definitely not used by students).

Table 7.5 summarises the mean expected level of usage by type of study centres for the nineteen stipulated functional categories.

Table 7.5
Perceived Study Centre Usage

Function	Level of Use by Students (Mean Values in Each Type of Study Centre[1]				
	1	2	3	4	5
Orientation meeting	2.3	2.4	2.0	2.6	2.6
Tutorial by lecturer/course writer	2.8	3.1	3.2	3.6	3.4
Tutorial by local tutor	2.0	2.9	3.4	2.9	3.2
Teleconference/satellite programme	3.2	2.4	2.9	2.9	2.8
Use the computer	2.6	2.7	3.1	3.7	3.1
Borrow library books	2.0	2.1	2.7	1.6	2.8
Read library books	2.1	2.5	2.9	3.0	3.1
Use a library catalogue	2.2	2.7	3.1	3.7	3.1
Use audio-visual equipment	2.8	2.6	3.3	3.0	3.3
Do photocopying	2.8	2.9	3.2	3.0	2.7
Do private study	2.8	2.8	2.8	2.4	2.7
Have a study group meeting with other students only	3.0	2.6	2.4	2.9	2.4
Receive counselling before deciding which course to enrol in	1.6	2.5	2.6	3.1	2.6
Complete application forms	2.1	2.7	2.8	3.7	3.1
Complete re-enrolment forms	1.8	3.1	3.4	3.5	3.0
Seek advice about administrative requirements of institutions	1.6	2.9	2.6	3.9	2.8
Attend a study skills course	2.5	3.3	3.1	3.8	3.0
Sit for exams	1.1	2.3	2.7	2.2	2.3
Attend a social function	2.9	2.8	2.3	3.0	2.7

[1] 1 = very heavily used; 2 = heavily used; 3 = unlikely to be used; 4 = definitely not used; 5 = don't know

Information contained in Table 7.5 suggests that on the average institutions (irrespective of type of study centre) do not perceive any significant degree of study centre usage for the following types of functions:

* tutorial delivery by lecturer/course writer
* tutorial delivery by local tutor (except for study centres where conventional teaching/tutoring is offered, as expected)
* teleconference/satellite program
* student access to computers
* for students to read library books (except again for Type 1 study centre)
* for students to use a library catalogue (again with the exception of Type 1 study centre)

- for students to use audio-visual equipment
- for students to do photocopying
- for students to do private study (with possible exception of Type 4 study centre where moderate usage for this function could be expected)
- for students to receive counselling before deciding which course to enrol in (again with exception of Type 1 study centre)
- for students to complete application forms (Type 1 study centre excepted)
- for students to complete re-enrolment forms (again with exception of Type 1 study centre)
- for students to seek advice about administrative requirements of institutions (Type 1 study centre excepted)
- for students to attend study skills courses
- for students to attend social functions (Type 3 study centre excepted).

On the average the responding institutions felt that the following study centre functions attracted significant usage by students:

- for orientation meeting
- for students to borrow library books (with the possible exception of Types 3 and 5 study centres)
- for students to sit for examinations.

Types 2, 3 and 5 study centres were expected, on the average, to sustain moderate to heavy usage for purposes of a study group meeting with other students only, that is, no involvement of staff. However, in Types 1 and 4 study centres, very little usage was expected for such a study group meeting.

Yet another dimension of study centre usage is the proportion of enrolled students who have attended the centre (at least once). Table 7.6 summarises the percentage of enrolled students attending the study centre during 1987 for each responding institution (two institutions stated that such student usage ratio was "not known").

Table 7.6
Proportion of Students Attending Study Centre 1987

Institution	% Use
C	58
D	"Moderate"
E	60
F	70
G	"Low"
I	45
J	29

Hence, in respect of the five institutions which provided hard data on study centre usage, on the average approximately 52% of enrolled students could be expected to attend the centre.

7.3.3 *COST OF STUDY CENTRE FACILITIES*

Although the study centre cost questionnaire sought information on non-recurrent costs (including building and equipment), no meaningful responses were received. Subsequently this issue was followed up through correspondence with four of the six participating institutions. Only two institutions (both being regional Colleges of Advanced Education) responded, indicating that caution be exercised in any interpretation of the resulting information.

One respondent (Institution D) indicated that an assignable area of 50 square metres was provided for a study centre servicing 200 students as follows:

Facility		Area Required (m^2)
Computer Room	)	
Teleconference Room	)	10 square metres each
Library	)	
Meeting Room	)	
Total	**50**	

Institution C's estimate of study centre space requirements for approximately 200 students was nearly 210 square metres as follows:

Facility	Area Required (m^2)
Teleconference Room	25
Computer Room	20
Meeting Room	25
Library/Storage	25
2 Class Rooms	80
Office/Reception	20
Toilets	15
Total	**210**

Assuming a building efficiency of 70% then a gross area ranging between 70 square metres to 300 square metres will be required for the study centre, depending on its envisaged usage. Given building cost of approximately $800 per square metre and assuming that capital costs are amortised over 40 years at an annual interest rate of 10% (as recommended by the former CTEC authority), using the amortisation formula

$$R = \frac{Pi}{[1 - (1\ (1 + i)^{n}]}$$

where R = amortised cost over n years
P = building construction costs
n = period of amortisation
i = assumed interest rate

then the annualised building cost of a study centre would vary from approximately $5,700 to nearly $25,000, or from $28.50 per student to $125 per student.

Institution C also provided information on study centre equipment requirements. This information suggests equipment acquisition costs of approximately $25,000 or using straight line depreciation over ten years, an annualised cost of $2,500 or $12.50 per student. Total facilities annualised study centre costs per student could hence vary between $41 and $138.

SECTION 8

DISCUSSION OF RESEARCH RESULTS

8 DISCUSSION OF RESEARCH RESULTS

8.1 Characteristics of External Students

It was not the purpose of this study to undertake and present a detailed analysis of external student demographic and other characteristics. The purpose of collecting this data was to enable a more insightful comparative analysis of data obtained from the four data collection components described in Sections 5, 6 and 7. Further, knowledge of the above demographic elements will enable more confident and generalisable conclusions to be made about study centre usage at the national level.

The population characteristics were relatively uniform between students attending the same type of institution and across different institutions i.e. TAFE, CAEs and universities. The main demographic characteristics of this sample of external students are similar to those reported by Anwyl et al (1987). In summary:

* The predominant proportion of students (~85%) were mature age, married and approximately half of the students had 1 or more dependent children.

* Approximately the same proportion of males and females studied externally. However there was a predominance of females in arts and education courses, whilst there was a predominance of males in business, science and engineering courses.

* Approximately 80% of the students were in full-time employment and approximately 10% were employed part-time or unemployed.

* A full range of occupational groupings was represented in each of the institutions in the sample. Four main occupation groupings predominated. These were:

  Administrative/Clerical - 10-30%
  Teachers/Lecturers - 10-40%
  Technician/Technical - ~10%
  Homemakers - ~10%

* As a group, external students, tended to have a limited number of commitments. Employment and family responsibilities were generally the main commitments in addition to their external study. Other activities such as social, sport and community commitments had relatively low priority.

* The majority of students (75%) lived in country cities and towns. Ten per cent of these students lived in communities of less than 1000 persons. This distribution was not likely to be a typical population distribution of external students as the sample excluded those students who resided in the same city or town as the institution. For example, all students attending a university in Brisbane were excluded from the sample.

* A high proportion of students in CAE and university courses (50-75%) already had a higher education qualification. However, for the TAFE students only 37% had either a trade certificate or a diploma. Most students (~70%) were in their first two years of their course.

* Reasons for studying externally generally related to circumstances preventing attendance on-campus and included: a career requirement; upgrading existing qualifications or completing a degree; retraining; isolation from a campus; not being able to afford to attend full-time; personal fulfillment.

* Regardless of institution, all students appreciated the opportunity to study according to their own schedule and to study while remaining in the workforce and thereby maintaining their incomes. However, students missed the lack of contact with lecturers and other students and experienced feelings of isolation. Students also missed easy access to library and computing resources. A further concern of external students was that their courses take too long to complete.

* Fifty per cent of the students indicated that they would have studied full-time if they had the opportunity, 31% showed a preference for mixed mode study, 12% for part-time study on-campus and 8% for external study only.

8.2 Student Communication with Institutional Personnel

One thing that all external students had in common was an expressed need for access to institutional personnel. The most predominant and significant need for access was lecturing staff. It was also clear that the majority of students did not wish to study alone and actively sought out ways and opportunities to meet with other students.

Based on the interview data, approximately 80% of all respondents had contact with their lecturers. Interestingly, of those students who had no contact, 46% indicated that there was no need for contact and that the written information was sufficient. It is important to point out that in 71% of cases where contact occurred the student initiated contact, in 17% of cases the lecturer initiated contact and in 12% it was a bit of both.

The most common form of contact made by students was by telephone. In the interviews it was found that 48% of contacts made by students to lecturers was by telephone. A small number of students indicated that they used electronic mail and facsimile. The reasons for contact with lecturers were difficulty with the study package and assistance with academic problems. This provides the reason for the high level of use of the telephone. Clearly students would be seeking immediate resolution to their difficulties.

With respect to a preference for the form of communication, there was a very high preference for face-to-face situations, although students were not totally averse to other forms of communication. From the interviews it was found that a total of 61% of preferences was for face-to-face situations with 40% preferring face-to-face one-to-one situations and 21% preferring face-to-face encounters through a tutorial or lecture situation. Eleven per cent of preferences was for one-to-one telephone calls and 10% for written correspondence. Teletutorials were preferred by 8% of students.

This result should not be taken to suggest that distance education providers should provide more face-to-face situations. It is reasonable to assume that less stated preference for other forms of communication, other than face-to-face, could be because students were either very experienced or unaccustomed with their use. Indeed, as reflected in this study, teleconferencing is not extensively used in distance education and when used is often not used very effectively. The use of electronic mail and facsimile is relatively new.

The foregoing provide insight into the role of study centres sought by students. Results from the study show that students consider that the following needs and demands can, to varying extents, be fulfilled through student centre functions:

* library resources and library assistance

* face-to-face contact with institutional staff for tutorials, workshops and lectures and for problem solving, counselling, motivational support etc.

* computing activities.

Students considered that the most worthwhile activities and events at study centres were those involving academic contact whilst administrative activities were rated relatively low. Also, study centres were seen by students as an essential place for library sources and for computing activities. Enthusiastic personnel who could organise activities e.g. self help groups, teleconferences, teletutorials and act as resource personnel cum advisors and counsellors were seen as very important.

8.3 Comparison of Student and Institutional Perspectives of Study Centre Usage

In most cases the functions of study centres are determined by institutions, based on their perceived needs of students. The facilities available in study centres used by students in this study are presented in Appendix E. This study sought to determine the level of congruence of the perceived usage of study centres by students and institutions for a range functions. A comparison of results between students and institution perceived usage is presented in Table 8.1.

Table 8.1
Expected Level of Usage

Function	Perceived Usage	
	Student	Institution
Orientation meeting	High	High
Tutorial by lecturer/course writer	High	Low
Tutorial by local tutor	High	Low
Teleconference/satellite program	Medium	Low
To use the computer	High	Low
To borrow library books	Medium	High
To read library books	Medium	Medium
To use a library catalogue	Medium	Medium
To use audio-visual equipment	Low	Low
To do photocopying	Low	Low
To do private study	Low	Low
To have a study group meeting with other students only	Medium	Low
To receive counselling before deciding which course to enrol in	Medium	High
To complete application forms	Low	Low
To complete re-enrolment forms	Low	Low
To seek advice about administrative requirements of institutions	Low	Low
To attend a study skills course	Medium	Low
To sit for exams	High	High
To attend a social function	Low	Low

Clearly there are major differences between student and institutional perceptions of usage. On the whole students place a higher priority on a greater number of study centre functions than institutions. The institutional view represented in Table 8.1 is supported by the generally low priority given to funding study centre operations.

There are major differences in perceptions between institutions and students concerning study centre usage for lecturer-student and student-student interactions, and computer use. In contrast to institutions, students perceive interaction with academic staff and use of computers at study centres as a high priority. A dilemma for institutions is how much notice should be taken of student expectations. Provision of tutorial and other forms of assistance at all study centres involves high costs. However through cooperative arrangements with other institutions, costs can be considerably reduced. Such a cooperative approach has been taken in the provision of microcomputers in a number of study centres.

From another perspective it may be argued that the high level of priority given by students for lecturer interaction results from the fact that study material provided by institutions is not sufficiently self-instructional and that further interpretation is necessary through lecturer contact. This may well be the case in a number of instances and this was indeed the case in one institution where study centre visits by academic staff were cut back following improvement in the quality of study materials. This is not to deny the importance of ongoing regular communication between students and academic staff.

8.4 Use of TAFE Colleges as Study Centres by Higher Education Students

A specific intention of this study was to explore the use of TAFE colleges by higher education institutions and to make recommendations regarding their appropriateness for use by higher education students.

In the study, the names of study centres used by students was obtained. Approximately 25% of students used TAFE colleges as their study centre. No particular evidence was obtained to suggest that TAFE colleges are necessarily better suited as study centres than other types of study centres used by students e.g. Education Centres, Community Centres. Furthermore, there is no evidence of higher usage of TAFE colleges by higher education students than of other types of study centres. This result is not unexpected as there can be considerable differences within and between states in regard to TAFE colleges with respect to size, types of courses available and the pressures on the use of resources within any one TAFE college. Further, the needs and demands of higher education students tend to be quite different to those of TAFE students. Also, situations can arise when both groups of students are competing for the same services, space and resources. For instance in many of the large metropolitan and city TAFE colleges a considerable proportion of the student population attend evening classes and would therefore be competing with higher education students for services, space and resources. On the other hand, small country TAFE colleges are often relatively poorly resourced to service the typical needs of higher education students e.g. library services and also probably have restricted opening hours.

There is no doubt that physical features can have an important psychological effect on usage and in this regard a number of the TAFE colleges used by higher education students are new buildings with comfortable facilities. It appears that what ultimately counts most for students are factors such as access to academic staff, library and computing resources and administrative assistance with problems. In this regard none of the TAFE colleges was "better" than other study centres used by higher education students. In fact, based on student interviews and discussions with institutional staff, there are a number of problems unique to the use of TAFE colleges as study centres for higher education students. These were identified as follows:

* *Access hours to study centre.* Most TAFE colleges close early in the evening and are also usually closed on weekends. At a number of colleges in the sample, special provision had been made to provide students with 24 hour access to computer facilities.

* *Library resources and library access hours.* Most of the library collections in TAFE colleges are relatively unsuitable for higher education students. However, where higher education institutions had supplemented the TAFE library collection, significant use was being made by students. A bonus to students was seen as having access to a librarian. However, a problem for nearly all students was the limited opening hours of TAFE libraries i.e. earlier closure during the week and not being open at the weekend unless special arrangements were possible.

* *Available space for study centre.* TAFE colleges are not necessarily available for use by higher education students. The researchers found instances where a study centre could not be located in a TAFE college because the college could not make space available. There were also instances where the presence of higher education students created room problems. Typically a special room could not be set aside for higher education students.

* *Management and organisation of study centre.* Higher education students are generally considered as "guests" in TAFE colleges. Formal user-pays arrangements between the tertiary institution and TAFE do not exist. In this circumstance the tertiary institution cannot directly influence the management and organisation of facilities and resources in the college. This situation does not permit a maximisation of the potential functions of a study centre located in a TAFE college.

* *Student identity.* Students using TAFE colleges have remarked on the difficulty in identifying with their institution as there is little in the TAFE study centre environment to support this. It was suggested that where TAFE colleges are used, the appropriate signpost etc. should be made.

8.5 Factors Affecting the Level of Study Centre Usage

8.5.1 *TRAVEL TIME FOR VISITS TO STUDY CENTRES*

The results presented in Section 5 demonstrated that a considerable proportion of students were not within easy reach of study centres - only approximately 25% of students were within 10 minutes travel time by car. For students in the higher education sector, a considerable proportion of students (40-50%) would need to travel more than 1 hour (to and from the study centre) to use a study centre.

A strong inference from these results is that a major factor for the relatively low use of study centres by students in the higher education sector is remoteness from a study centre. This is borne out by the fact that for the TAFE institution, 70% of students were within 20 minutes travel time and only 13% had not visited a centre. On the other hand the considerably greater remoteness of students in the higher education sector from study centres largely explains why 30-60% never visited a centre. The usage of study centres by TAFE students was approximately twice as great for similar activities.

8.5.2 *OPENING TIMES OF STUDY CENTRES*

The preferred time for students to visit study centres for activities and meetings was a weekday between 6-8pm followed by weekday day times. All other times had much lower preferences. A slightly different pattern was observed for Institution A. The reason for this pattern is that most of the clientele are practising teachers. It appears they prefer to engaged in study-related activities immediately after school and up to 8pm. The overall pattern is not unexpected as the majority of students are in full-time or part-time employment. High preference for day time access can be accounted as best meeting the needs of homemakers, the part-time and unemployed person and the full-time employed person who may have flexible working hours. A considerable proportion of study centres in this project do not have extensive opening hours as shown in Appendix E. This factor may well contribute to the low use of study centres by students.

8.5.3 *COURSE EMPHASIS*

For the majority of courses at each institution students can use the study centre for a range of services and support e.g. library resources, computer facilities. However, very few activities at study centres are ever compulsory and resources used by students tend to be those which a student may not have ready access to e.g. computer, photocopying machine and for library resources. In the greater majority of instances, students rely on the study package consisting of printed material and possibly audio-visual material as the central learning resource. However, a number of courses do require students to use study centres for the following purposes:

* teleconferences
* tutorials by local tutor or course lecturer
* computing (where the student doesn't have own computer)
* library facilities.

Thus the reasons for use of the study centre by students tend to be directly related to specific course needs, lecturer and/or institutional requirements. Other needs tend to relate to the particular teaching philosophy adopted by the institution. For instance, some institutions, e.g. Institution C, require some student-lecturer face-to-face contact whilst there are institutions, e.g. Institution B, which do not require any face-to-face contact and in fact encourage contact by other means e.g. telephone, facsimile.

8.5.4 *RESOURCES AVAILABLE AT THE STUDY CENTRE*

Results from both the student questionnaire and interviews indicate that a library collection and borrowing facilities are students greatest and most frequent need. This is also rated by students as the most important facility for the "ideal" study centre. The next most sought after resource is access to computers. The need for resources such as photocopying, audio-visual and tea/coffee making facilities rated relatively low.

Library collections where they did exist in study centres, tended to be relatively small collections for the obvious reason of cost to establish and maintain them, and the fact that the collections will service only a relatively small fraction of students in a course. Thus most collections in study centres tend to be course specific reference collections. In order to further accommodate student needs for access to other resources, a number of study centres have a microfiche or library catalogues of resources held at the institution's main collection. These may be called upon through the study centre librarians and/or by direct contact with the institution's main library.

Not unexpectedly, where a study centre had a "good" library collection it resulted in:

* a high level of usage of the collection by students in different courses and from different institutions
* use of the centre by students for meetings
* a considerable need for use of other resources, computers, audio-visual and photocopying equipment
* the availability of tea/coffee making facilities for students
* use of the centre for private study purposes.

In Section 6 it was found that the majority of students had a number of competing commitments (work, family, sport, social). Students being conscious to use their time to maximise efficiency, would want to make any visit to a study centre worthwhile, especially if considerable travel time was involved. It follows that students would probably be multi-purpose users of a study centre. That is, for each visit to the centre a student would, for example, borrow books, do some computing or study or meet with fellow students. It follows that study centre usage by students is a function of resources available. The greater the range of resources the higher the usage of the centre and vice versa. The library collection can be considered a key focal element in the range of activities that are likely to be undertaken by students. Perhaps having a library collection in centres may be a reason for students to use a study centre as a place for study, the reverse is unlikely to be the case.

8.5.5 *PERSONNEL AVAILABLE AT STUDY CENTRE*

It is clear from both the questionnaire and student interview results that students desire face-to-face contact with institutional staff. Reasons for contact were many and varied, however, the main reasons were academic counselling, administrative assistance, personal advice, problem solving, explanation of material in the study package. The interview data tended to suggest that the desire of some students for face-to-face contact was simply one for a more personalised learning experience.

However and more importantly, when students do make contact with staff at a study centre they seek accurate and reliable advice and assistance. In the case of administrative assistance, this support also needs to be relevant and up-to-date. Thus the success of a study centre to a large extent hinges on the quality and commitment of its staff, whether they be local tutors, library or administrative support staff. Institutions C, D and E in this study provided local support to their students and also had higher student usage of study centres than Institutions A and B.

8.6 Institutional Costs for Study Centres

The problems of measurement of distance education costs within the "integrated model of Australian external studies" (Ng and Sharma 1987) have been detailed comprehensively elsewhere by other researchers. These problems were very significant in this study, particularly in the quantification of indirect costs of study centres. The "absorption costing" as articulated by Rumble (1986) (but used since 1974 in Australia by the Director of Central Institutes of Technology) is not a new concept to Australian higher education. Perhaps it is theoretically useful but in practice it is very difficult to implement. Further, for proration of indirect costs on a uniform basis to achieve full absorption, there is a need for extensive interaction between the researcher and the respondents. Due to funding constraints this was not possible and hence caution should be exercised in ascribing too high a degree of precision of cost measurement emanating from the study; consequently cost data provided should be regarded as a first approximation.

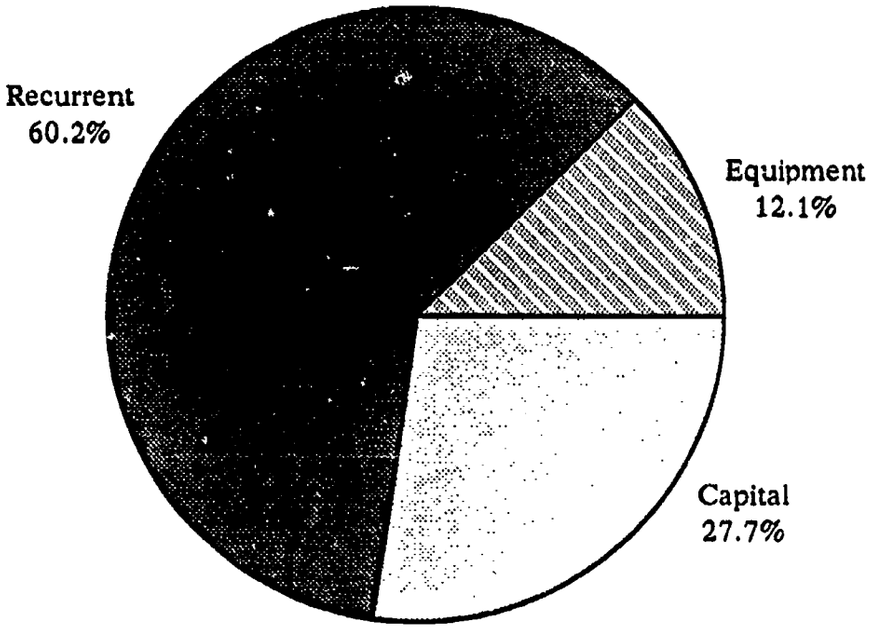
This study suggests that institutional recurrent cost per enrolled external student of study centres, in 1986 was approximately $62.00 or nearly $120 per active study centre student; the study centre recurrent unit cost figure is very close to the cost per student index ($56 per student) quoted in Dekkers (1986) for outreach student support systems giving a degree of confidence in the resulting information. If the responding institutions are representative of the tertiary education sector, then this would translate to a total recurrent expenditure of approximately $2.8 million (in June 1986 prices) for

the Australian higher education institutions appertaining to 1987 on study centre activities. However, as stated above this recurrent cost data should be regarded with some caution due to problems identified with the application of the activity costing; it is merely indicative of the order of magnitude of system-wide expenditure on study centres. This investigation found that approximately 70% of these recurrent costs were expended in salaries, suggesting the labour-intensive nature of delivery of study centre services. Analysis of direct recurrent unit costs of study centres indicated that operating costs of such facilities can be reduced if existing institutional structures and services can be utilised.

Institutional responses suggest that study centres were perceived to be of utility for a limited range of activities, which also varied between institutions. Further, only half the enrolled students were expected to attend the study centre at least once. Given the limited range and depth of study centre usage and the costs involved, it may be necessary to undertake further research into recurrent costs/benefits of study centres to ascertain whether such an expenditure is justified or whether alternative low costs strategies can be developed to deliver the limited service demands of such facilities. In this study, results do not indicate that the often suggested utilisation of TAFE facilities for higher education study centres is necessarily a cheaper strategy for the development of Australian study centres. In this respect it is additionally noted that the estimated higher education nation-wide study centre recurrent cost of $2.8 million compares very favourably with the "total annual cost of $2.072 million (quoted in Bowser et.al., 1987) for the fifteen VTOCN study centres in Victoria.

Very few responses were received on capital and equipment costs of study centres. Data received suggests a total annualised cost of study centres in Australia of approximately $115.50 per student, assuming limited functions or $199.50 per student if a comprehensive range of external studies support services (including some face-to-face teaching tutorial) were provided. Figure 8.1 shows the proportions of study centre costs for the limited activity scenario.

Figure 8.1
Study centre costs per student



Clearly recurrent costs constitute a large proportion of total study centre annual costs (approximately 60%), indicating that much of the costs of these facilities are independent of location, that is, these costs will be incurred whether the study centre is part of TAFE or located elsewhere. Even capital and equipment costs which are sometimes assumed to be provided "free of charge" to higher education for study centre

purposes, do cost the tax-payer considerable sums of monies. Buildings and equipment do depreciate, deteriorate or need to be replaced due to technological obsolescence and hence cannot be regarded as costing nothing, as shown in this study. It is, therefore, concluded that study centres should not be located in TAFE institutions on the basis of arguments of cost reductions alone. The cost criterion can only be applied in favour of a TAFE model of study centres if these institutions have either under-utilised facilities or staff resources which can be made available for higher education activities such as study centres at no cost or very reduced costs. Such a strategy would need to be justified on other criteria including educational or increased geographical access which TAFE may provide to higher education external students. Since recurrent costs of higher education study centres a.e only approximately 1.5% to 2% of the total recurrent funding per student then perhaps the location of study centres is a decision best left with individual institutions.

SECTION 9

STUDY CENTRES AS A COMPONENT OF SUPPORT SYSTEMS

9 STUDY CENTRES AS A COMPONENT OF SUPPORT SYSTEMS

9.1 Future Directions of Support Systems

The diversity of support systems for distance education in Australia which may range from totally centralised to a mix of centralised and decentralised systems has been discussed elsewhere in this report. Furthermore, study centres as a means of providing decentralised student support are by no means a feature of the support provided by the majority of distance education providers. It has also been mentioned that in the past few years considerable changes have occurred in the overall provision of distance education and that further changes are likely to continue to occur for some time yet into the future. In this context it is appropriate to ask the following questions:

> Is there a justification for continued use of study centres for student support?
>
> If so, how will study centres be used in the future?

Answers to these questions need to be considered in terms of existing knowledge on the use and cost of study centres as a component of student support that has been reported in this study and documented elsewhere, and in terms of the anticipated evolution of support systems in Australia.

These researchers believe that the current diversity of support systems will gradually evolve to a single model for student support operational at a national level. This belief is based upon three interrelated factors and briefly touched upon earlier in this report. These are:

* the application of new communications technology and computers
* the development of a distinctive Australian philosophy of distance education
* the economics of provision of distance education.

Each of these factors are now briefly considered in terms of their likely impact on the use of study centres.

9.2 Applications of Computers and New Technology for Student Support

A whole range of enhanced communications and computer technology are being introduced for distance education in Australia and elsewhere. This has the advantage of giving students greater independence and autonomy over their learning environment through improved access to resources and persons that were previously affected by distance and time delays. The range of communication methods and their use in the provision of distance education that are now in use are summarised in Table 9.1.

It is anticipated that future developments in telecommunications applications using AUSSAT will see vast improvements in the quality of access and amount of communication between students and lecturers and access to course information. For instance, Q-Net, the Queensland satellite telecommunications network, currently only uses selected sites (e.g. schools and TAFE colleges) for the transmission of video programs and for interactive video teleconferencing using one-way-video and two-way-voice. However, in the near future it will be possible to have programs transmitted to students' homes.

Table 9.1
Communication Methods for the Provision of Distance Education

Method	Use
Print media via postal service	- Main communication medium for course material and administrative purposes, general correspondence, library resources
Telephone	- For data transmission between students and institutions using networks - Communication between lecturer and students and between students on a one-to-one basis or by teleconference and teletutorials - 008 line for direct access to institutions by students for specific purposes - Recorded message service
Viatel	- Application as bulletin boards, course information directories etc.
Electronic mail	- Enables interactive communication between student-student and student -lecturer for interchanging messages - Access to and transmission of library catalogue information and documents
Facsimile	- Similar application as electronic mail but it has the advantage that a complete text can be sent e.g. a student assignment
Interactive video	- One-way-video and two-way-voice is being used in the delivery of course by satellite
Videotex	- Provides access to information data bases that can be interactively used

Also, networking applications using the telephone system are being increasingly used for distance education. Of particular relevance is the use of Digital Wide Area Network (WAN) for student support. Students can be connected with the on-campus network of computers using the telephone system located either in study centres or in the students' home. Reasons for networking include:

* electronic mail and bulletin board services
* access to library catalogue
* use of central computer software packages.

For these applications the medium for networking is AUSTPAC's Telecom packet switching system. To use the system the student needs to be a registered AUSTPAC user and have access to a microcomputer that can be interfaced to a modem connected into the telephone network. If the student owns a suitable microcomputer and modem, cost to the student is a $55 once only registration and $4.80 monthly rental.

Networking of students will have a considerable effect on study centre usage since, as shown elsewhere in this report, study centres at present have considerable use for computing and teleconferencing. For example, the tertiary providers in Queensland use a network of approximately 20 study centres that have been equipped by these users with teleconferencing equipment, microcomputers and a range of computer software. A number of these study centres also have modems to enable access to institutional computer software packages and library catalogues. The motivation by institutions for installing teleconferencing equipment was to improve student access to academic staff and for instructional purposes in courses requiring interaction between the lecturer and students and between students. Computers and software were placed in study centres for two main reasons. Firstly, computers needed for computing subjects, were either too expensive for students to purchase or difficult to access. Secondly, students needed access to computers to undertake computer-aided-learning or computer-managed-learning activities.

It has been argued that computing and teleconferencing facilities are needed in study centres because of the perceived expense of either equipping or making use of these facilities in the home. Such an argument is increasingly difficult to sustain as nowadays there are very few students who do not have ready access to a telephone. Also, an increasing number of students have their own computer or have easy access to one. A recent study by Kember and Dekkers (1987) indicated that only approximately 60% of students either owned a computer or had reasonable access to one. If prices of computers continue to decline institutions will, in the foreseeable future, be able to assume that all students have access to a computer.

As the price of microcomputers comes more within the reach of most persons, more and more students will purchase one to enable them to do their computing at home rather than at a study centre. Furthermore, as telecommunication costs such as AUSTPAC decline, as seems likely, institutions will be able to afford to link students in their homes rather than at a study centre. A further impact of lower telecommunications costs will be greater use by the student of electronic mail, central computer software systems, library catalogues and other data bases.

Thus the twin effect of cheaper telecommunications charges and lower prices of computers will see a significant decline in the use of study centres for teleconferencing and computing activities by students.

It would appear that the role of study centres for teleconferencing and computing has been a relatively transient one and it is likely that other items of educational technology will have a similar fate. A further example is facsimile which is now available for student use in a number of study centres. Will this device suffer the same fate?

Perhaps study centres have a role for distance education providers as a facility for the introduction and trialling of new educational technology and communications applications that are either not affordable or accessible to students. As the applications become either more affordable to students and/or outmoded, their use in study centres would then decline.

The use of satellite telecommunications applications e.g. video teleconferencing, as alluded to above will result in study centres being used as communications centres for a considerable period of time into the future. It is expected that the introduction of satellite telecommunications will have considerable implications for distance educators. Firstly, their introduction is costly, complex and requires the development of a system-level infrastructure. Secondly, no single individual institution is likely to succeed in going it alone, a prerequisite for its ultimate success, efficient and cost effective use requires cooperation and cost sharing arrangements between institutions (Lundin, 1988).

9.3 Development of a Distinctive Philosophy of Distance Education

Both in Australia and elsewhere there have been significant changes in the way the teaching mode for distance education has been conceptualised and practised. In the Australian context three broad phases are discussable and have been described by ASPESA (1988). They are:

* the external studies phase (approximately 1911 to early 1970s)
* the distance education phase (approximately early 1970s to mid 1980s)
* the open learning phase (mid 1980s into the future).

The present viewpoint of many distance education providers is that learning at a distance should be based on self-instructional and self-paced materials that demand of the student a high degree of independence and autonomy over the learning process. Accordingly, an increasing number of study packages now contain study guides, supported by resource books, audio and video tapes, computer-assisted-learning and computer-managed-learning materials.

High quality self-instructional and self-paced course materials have a three-fold appeal for institutions that offer both on-campus and off-campus courses. Firstly, the materials can be used for on-campus students to replace the traditional lecture based form of presentation of the course, or as supplementary course materials for students, or made available to students as an alternative to lecture and/or tutorial attendance. Secondly, the materials can be marketed by the institution to other institutions, commerce, industry and training organisations. Thirdly, and an important implication of this model for distance education, is that self-instructional packages should require either none or very limited ongoing academic support, whether it be from a central campus or through a study centre or some extended campus arrangement. Thus study centres would be seen as having a reduced role for providing academic support.

It is generally accepted that it is possible to design course materials that need no ongoing academic support. These tend to be courses that emphasise or require rote learning of facts or procedures. Examples of these would be from such areas as elementary mathematics, statistics or accounting. This type of course is also well suited to computer-managed-learning. However, the majority of tertiary courses require higher levels of cognition and many require ongoing interaction with academic staff, in the role of tutor or mentor. Such interaction is necessary in order to develop in students problem solving and communication skills for both specific and general applications.

It can be argued on two further grounds that academic support is an integral component of the study package. Firstly, research on learning (Witkin et al, 1976; Entwistle and Ramsden, 1983) advocate the need to cater for differences in learning styles. The fact that some students don't seek academic support during a course whilst other students need it on a continuous basis, as found in this research, is in part a reflection of an individual's learning style and preference. Thus catering for these individual differences in the design of the study package provides a means of greater access to learning. Secondly, it is also necessary to recognise the personal and academic backgrounds of mature (adult) learners. Knowles (1980) has developed a set of principles that apply to design of materials for adult learners. These are summarised as follows:

> *Concept of the Learner.* It is a normal aspect of the process of maturation for a person to move from dependency toward increasing self-directedness, but at different rates for different people and in different dimensions of life. Thus the task is to provide independent learning materials. Thus study material should be, as far as possible, self-instructional and self-paced and contain self-assessment material.

Role of Learners' Experience. As people grow and develop, they accumulate an increasing reservoir of experience that becomes an increasingly rich resource for learning - for themselves and for others. Accordingly, study material should be activity-based and promote experiential learning.

Readiness to Learn. People become ready to learn something when they experience a need to learn it in order to cope more satisfyingly with real-life tasks or problems. Thus study material should be relevant to the learner's own needs and encourage the learner to discover the need to know.

Orientation to Learning. [Adult] learners see education as a process of developing increased competence to achieve their full potential in life. They want to be able to apply whatever knowledge and skill they gain today to living more effectively tomorrow. Accordingly, learning experiences should be organised around competency-development categories.

9.4 The Economics of Provision of Distance Education

Amongst the other factors, economics (costs) for the provision of distance education is an important consideration. In Section 1 it was shown that the types of delivery systems for distance education can be presented on a continuum. One extreme is to use highly developed self-instructional material that requires limited ongoing academic support. The other extreme is to use course materials that are highly dependent upon ongoing academic support that may be provided through study centres and other forms of extended campuses.

The development of self-instructional materials based on a multi-media approach as discussed in the previous section requires the use of course development teams consisting of academics, course development and media production experts, editors, graphic artists. Also desirable is sophisticated computer-aided publishing equipment and media production equipment for audio and video tape productions. Thus the necessary up-front costs for development and production of study materials using a course team approach are considerable (Rumble, 1986; Ashenden, 1987) and often beyond the reach of distance education providers.

Costs can be contained through economies of scale by larger print runs and a lesser need for revisions of material (Harold et al, 1988; Watson, 1988). In addition there is also the potential of recouping development costs through the sale of materials to other institutions, commerce, industry and other organisations. Costs can be further offset by using the materials for on-campus students by either replacing and/or reducing the dependence on the traditional lecture approach.

The implications of using highly developed self-instructional course materials for distance education in Australia have been considerable. A cost saving for institutions, following an initial high investment in production, is that the course should only require a relatively low level of ongoing academic support. This would considerably reduce the need for regional support through study centres. Also, course materials are now being developed under cooperative and cost sharing arrangements and the sale and exchange of study materials between institutions has increased. Additionally, there has also been a considerable rationalisation of course offerings by institutions increasing student numbers in courses.

The alternative, using study materials that require greater dependence on ongoing academic support should not be rejected. Academic support can be provided through an increasing number of avenues, a number of which are very cost effective. Support through study centres or extended campus networks can now be extended through two-way communication using teletutorials and teleconferences and more importantly using electronic mail and student access to data bases as discussed in Section 9.2.

This study has highlighted the absence of detailed comparative costing data that take into account factors such as establishment costs and the use of different types of student support costs. In the absence of such information distance education providers are left in somewhat of a dilemma when required to make decisions concerning appropriate delivery systems that take cost considerations into account.

These researchers believe that the provision of distance education is at a crossroads situation because potential applications of communications technology, some of which is now being trialled, will considerably influence teaching methodology and related support services. For instance, one can be sure that in the not too distant future print material will not be the only main source of study learning materials. One possible future scenario is that students will access all study material needs for a course via a computer terminal. Access to a library may also be no longer necessary as students could access library materials via a terminal and two-way voice and data communications will also be possible between lecturer and students and between student and student.

Development of appropriate costing methodologies are therefore deemed essential to ensure that cost effective procedures for the development and delivery of distance education can be determined.

9.5 A Model of Student Support and the Role of Study Centres

Based on the foregoing sections and the cited literature, this section presents a model of student support based upon:

* student and institutional perspectives, requirements and needs
* current trends and directions for the provision of distance education - viz the future extensive use of telecommunications and computers.

Student perspectives, requirements and needs that should be accommodated for in the design of a student support system are as follows:

* *Access to academic, support and other students.* Direct contact is possible through tutor and mentor systems located on campus or through a study centre network. Access is also possible through telecommunications systems e.g. telephone, electronic mail etc Student interaction may occur through study centres, residential school etc. or by available technologies.
* *Student learning characteristics.* Independent and self-paced learning does not suit all learners, nor do all learners need a high level of academic support and other forms of interaction. Thus the study package needs to accommodate a range of learning styles and interaction between students and academic staff.
* *Access to library and other resources for learning.* Some students, because of isolation, physical handicap etc., have difficulties regarding ready access to library resources, computers needed for study. This requires the provision of independent study materials.

* *Student learning environment and background.* Most external students have family and work commitments and therefore the learning environment student preferences should not necessitate compulsory attendance schedules at study centres or residential schools and require study away from the home to use library resources or computers etc.

Institutional perspectives, requirements and needs that should be considered in the design of student support systems are as follows:

* *Teaching philosophy.* This will determine the type of academic and administrative support system i.e. centralised or decentralised, the nature of support i.e. face-to-face or vicarious, the type of learning programs i.e. independent study systems versus teacher dependent systems.

* *Cost of provision of support.* This is largely dependent on teaching philosophy but is also considerably affected by course enrolments and production cost of study materials. Thus this variable cannot be isolated as an independent variable in the design of a support system.

* *Student access to course.* Whether or not a course can be made available to a wide range of students in different locations, i.e. remote locations, interstate etc. depends on the degree to which the course is dependent on centralised support from academic staff. Courses not highly dependent upon support or interpretation by academic staff i.e. independent study courses can usually be implemented successfully at a national level. Courses can be made more accessible to students by the provision of study centres and extended campuses. Such locations also perform an important role for the introduction and trialling of innovations in educational technology and communications systems as discussed in Section 9.2.

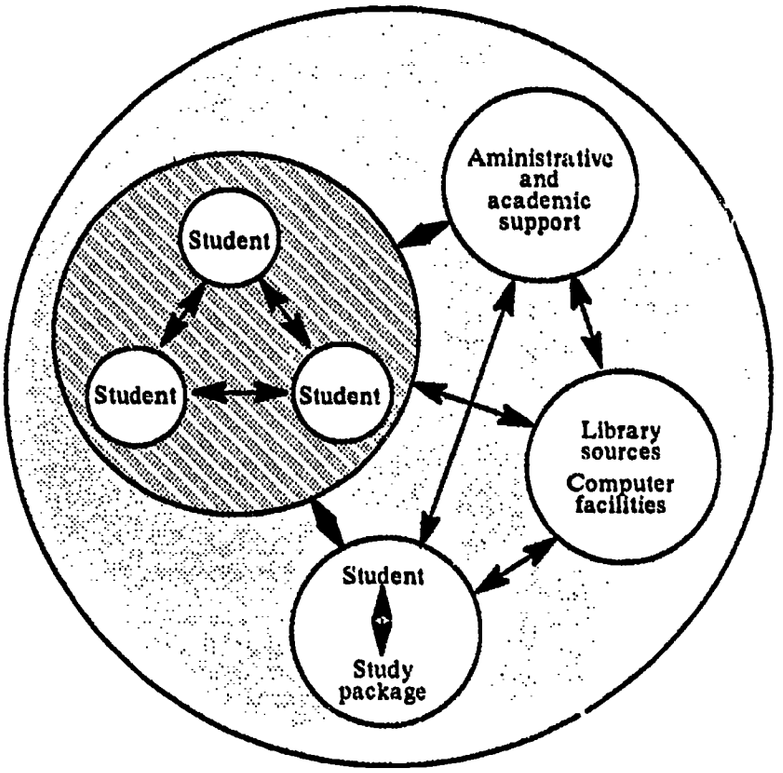
Thus two essential elements that need to be incorporated into a model support system in distance education are:

* Approaches that will enable interaction with academics or other institutional personnel and students. Interaction, may be face-to-face contact or through available technologies.

* Ready access to learning resources and facilities that are needed for study e.g. library resources, computers, computer software etc. These may be made available by some mechanism through the central campus or study centre or by available technologies e.g. facsimile.

A model support system including these two elements and showing interactions between students, institutional staff and resources is shown in Figure 9.1.

Figure 9.1
Student learning environment



This model permits the provision of a range of academic and administrative support and resource services either centrally or through a study centre. Also interactions between students and academics or other support staff can be through face-to-face contact, postal services, by telephone, electronic mail etc. Interaction between students and academic staff may also be through intermediatory support such as a study centre liaison officer.

It needs to be acknowledged that it will never be possible to make available to all students the same type and level of communication and resources. For instance, students at remote homesteads and isolated farming and mining communities will have fewer opportunities for face-to-face contact with institutional staff and other students. Thus the range of communication options and access to resources for students in these locations will be more limited than is the case for students residing in cities and towns.

Different scenarios for the application of the model follow. Clearly introduction of applications of satellite telecommunication and further use of computers will considerably lessen the inequitable provision of support and other services.

9.5.1 *SCENARIO 1*

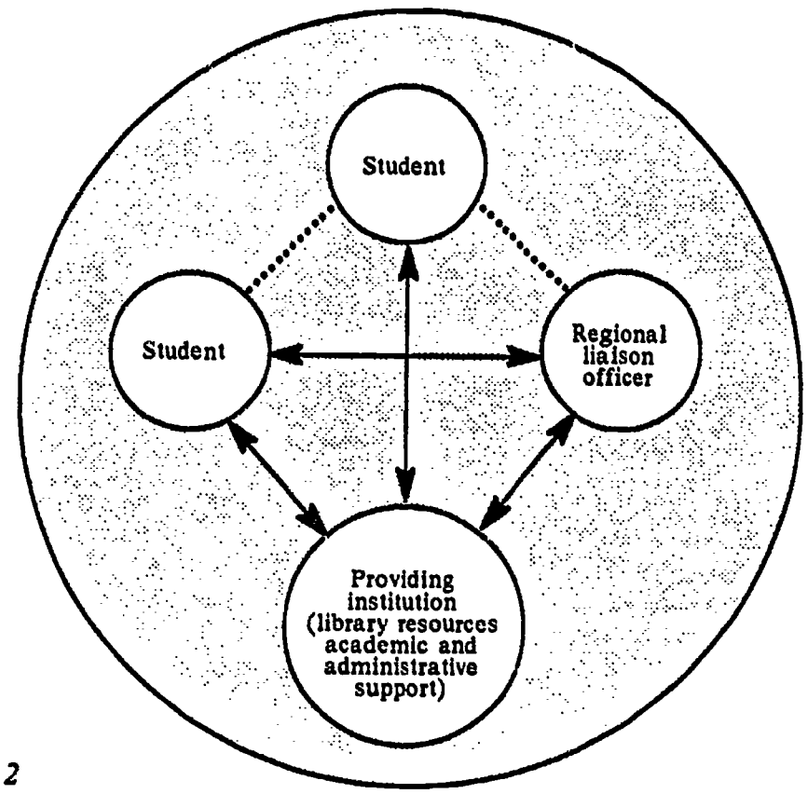
Support System for Students in Isolated Communities

This support system would apply to students in isolated situations or communities, generally linked with farming or mining. In this scenario the student does not have direct access to library resources and computing facilities that are typically available in regional centres. The support system depicted in Figure 9.2 contains two levels of support. Academic and administrative support

provided centrally and support through an intermediatory, a regional liaison officer, to act as a resource person, counsellor and advisor for a number of providing institutions. In this support system there is only a limited range of communications options. These are usually the telephone and a postal service. However, students residing in mining communities also generally have access to facsimile or electronic mail.

Interaction between students tends to be relatively limited due to geographic isolation. At present, students residing in isolated communities need a study package that is highly "self-instructional" because of the limited opportunities for interaction and difficult access to library resources etc.

Figure 9.2
Support system for a student in an isolated community



9.5.2 *SCENARIO 2*

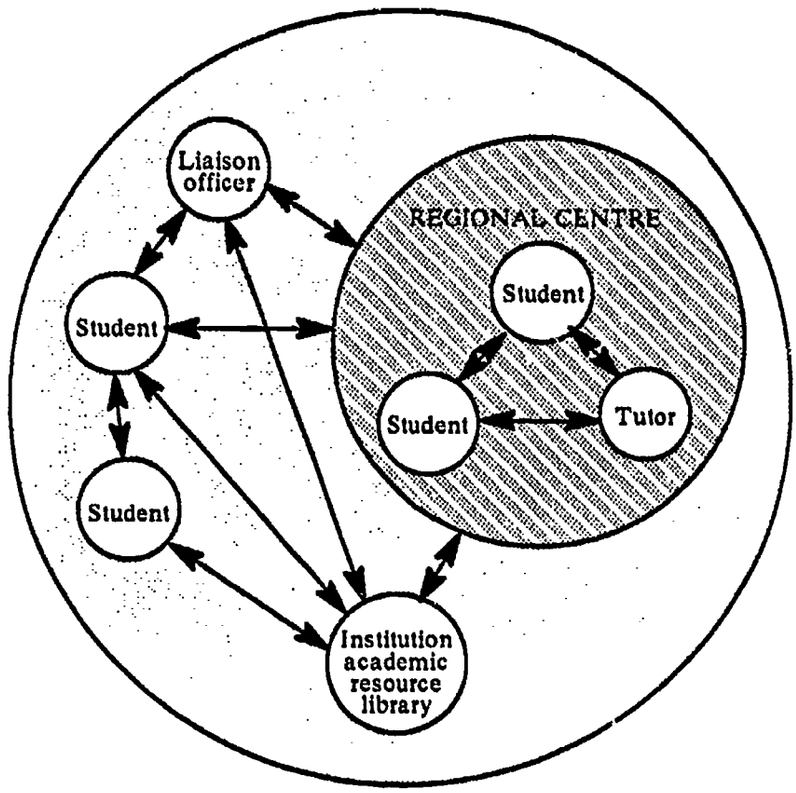
Student Support System Based in Regional Centre Support

This system applies to students who have reasonable access to a location that has a TAFE College, Education Centre or Community Centre. Available at the location would be library resources, computer facilities, rooms for group meetings, tutorials and teleconferencing.

For this support system, presented in Figure 9.3, the regional centre is seen as an integral component of student support. The organisational models at the regional level presented in Section 3 are appropriate. Thus in regions where student enrolments are either small or dispersed over a large area, a liaison officer-cum-local tutor is appropriate. However, in regions with a large number of external students which may be from a number of institutions, a study centre coordinator is appropriate. Such a person would be supported by a librarian. The regional centre may also have local tutors and/or liaison officers. Such persons could be accessible to students at their homes or at the centre.

Figure 9.3

Support system for a student with access to a study centre in an isolated environment



Communications options between students, regional staff and the central campus can be considerable. The form and options taken could be a function of teaching philosophy for the course and course needs. An option available to students in this scenario is the opportunity for face-to-face contact with local tutors or visiting institutional staff at a centre. This location can also be used by students for group activities e.g. self help groups, study and social functions.

Regional centres, in this scenario, are able to provide students with access to a basic library collection and computer facilities. Student specialist library needs would have to be catered for from a central library collection. Access to the library catalogue would be possible through AUSTPAC as discussed in Section 9.3. Likewise students in computing subjects could be provided with access to the institution computer centre's software systems.

Cost of regional centres for institutions, as discussed in Section 7, are not very significant. The major recurrent cost is for staffing. This cost and the cost of provision of library and computer resources is significantly reduced through cooperative cost sharing arrangements between users.

9.5.3 *SCENARIO 3*

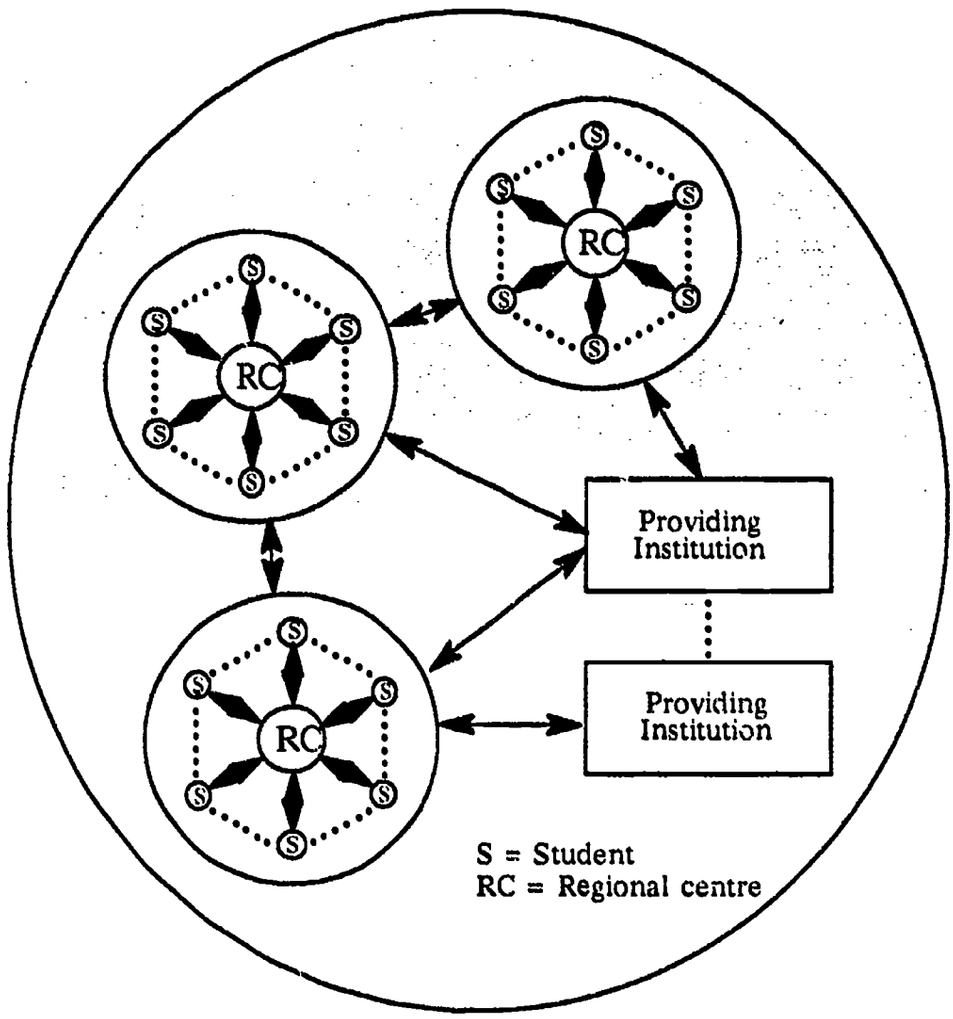
Student Support System as a Component of a Communications Network

This system would be operative in large cities or towns that permit the establishment of a communication network. The regional centre is a well staffed and resourced facility for external students e.g. TAFE college, a tertiary institution or an extended campus. The main differences between this support system scenario and scenario 2 is that students have available to them a better resourced regional centre which lessens their dependence on the providing institution.

Such a regional centre can be part of a communication network involving a number of providing institutions as shown in Figure 9.4. The regional centre functions are similar to the previous support system scenario but is able to cater for a range of services to a number of institutions. The Capricornia Institute Gladstone Centre and the Northern Territory External Studies Centre typify this support system. These centres are available to cater for students from different institutions e.g. student orientation, study skills programs, tutorial assistance, computing and library services, student counselling and advice etc. In addition these centres can act as a brokering service and promote tertiary education within the community.

This scenario of support system is needed for distance education providers in order to extensively make provision of external courses at the state and national level.

Figure 9.4
Student support system as a component of a communication network



9.5.4 *COSTING OF THE THREE SCENARIOS*

The costing of the three scenarios using recurrent cost per students and capital costs for study centres as derived in Section 7.3.3 is shown in Table 9.2.

Table 9.2
Estimated Study Centre Costs

Type of Centre	Cost ($)	
	Estimated Total Recurrent	Estimated Recurrent
Scenario 1	4650	62
Scenario 2	39500	200
Scenario 3	39500	133

Scenario 1, a support system for students in isolated communities, is a "study centre without walls" since the Regional Liaison Officers would be operating from their homes. It follows that capital costs will be zero and the recurrent expenditure not significantly different to the current average. Recurrent cost per student will be $62 (in approximately June 1986 cost prices) or with a typical servicing of 50 to 100 students (average of 75 students) is expected to require recurrent expenditure of $4650 per annum for a study centre. This cost could be shared by one or more institutions.

In Scenario 2, a system based in regional centre, again the unit recurrent cost is not expected to vary significantly from that identified in this study ($62 per enrolled external student). It is envisaged that such a study centre will typically service 200 students generating a total operating expenditure of approximately $12,400. Annualised building space cost would be $125 per student and equipment depreciation cost of $12.50 per student. Hence facilities costs to service 200 students will be $27,500 and total costs (including facilities and recurrent expenditure) of nearly $40,000 under this scenario.

Scenario 3, a student support system as a component of a communications network, is identical to Scenario 2 above in terms of demands on resource allocation. Therefore, total annual cost of $40,000 (in June 1986 cost prices) is expected. However, in this scenario the study centre will typically service 300 external students generating a unit cost of about $133 per student in comparison with nearly $200 per student in Scenario 2 above.

It is to be noted that the estimated expenditure is significantly dependent upon the number of students serviced. Also, with institutions sharing the costs of using study centres in the above scenarios on a user pays basis for services provided, the cost per student can be significantly reduced. For example, if five institutions equally share costs then the recurrent costs per student in each of the above scenarios would be $12, $40 and $27 respectively.

SECTION 10

CONCLUSIONS AND RECOMMENDATIONS

10 CONCLUSIONS AND RECOMMENDATIONS

10.1 Conclusions

In Australia, the provision of distance education and the use of study centres as a component of the student support system has developed through an evolutionary process and there now exists a diversity of support systems as one would expect, given the institution-specific way in which those systems have evolved.

The major aim of this study has been to identify and quantify the use of study centres by students and institutions, to determine student and institutional perspectives on the use of study centres and to determine cost of study centre usage. Conclusions from the research are:

* With respect to their studies, external students see as their greatest priority the opportunity for interaction with academic staff and other students. Ready access to library resources and computer facilities is a further important priority. Study centres are seen by students as having an important role in providing for and facilitating interaction with staff and students and for access to resources for study.

* Students' preferred form of communication with institutional staff and other students is by face-to-face contact, followed by one-to-one telephone contact and then teleconferences. It was clear from this study that the majority of students had little experience with teleconferences and were relatively unfamiliar with use of electronic mail and facsimile.

* Considerable differences were found to exist between student and institutional perspectives of the need for and usage of study centres. Students perceived that they were making a relatively higher use of study centres compared with institution perceptions of study centre usage. The latter view is consistent with the institutional view of study centres as merely fulfilling a supplementary role in student support. The highest perceived areas of usage of study centres by students were for different forms of interaction with academic staff, library usage and for doing computer-based activities.

* Whilst the perceived level of usage of study centres by students is high, the actual usage is relatively variable. Factors identified as affecting the level of study centre usage are: travel time taken to visit study centres; opening time of study centres; course emphasis of institutions; and, resources and personnel available at the study centre.

The above conclusions are consistent with those reported in previous studies (Gough, 1980; Castro et al, 1986; Northcott and Shapcott, 1986).

* TAFE colleges are considered to be suitable study centre venues for higher education distance education providers. However, no particular evidence was produced to suggest that TAFE colleges are necessarily better suited than other types of study centres used by higher education e.g. education centres, centres established by distance education providers. Problems were identified in using TAFE colleges, in particular the access hours to libraries and the availability of suitable space for student meetings, tutorials etc.

* Institutional recurrent costs for study centre provision are relatively small, approximately 1-2% of student recurrent expenditure per EFTSU. The largest recurrent expenditure item is for staff.

* The recurrent cost and the cost of equipment for study centres can be considerably reduced through cooperative and cost sharing arrangements as is already occurring in a number of study centres.

* TAFE colleges, as study centre facilities, are more expensive than other types of study centre facilities in terms of recurrent costs.

* Whilst study centres are by no means a universal feature of student support for the provision of distance education within Australia, this report provides a case for their continued use for the following functions:

  - a place for student interaction with academics and other students
  - access to library and other resources for students e.g. computers
  - a place for introduction and trialling of new technology applications, in particular satellite telecommunications applications.

It is clear from the foregoing conclusions that it would be a mistake to assume that, although distance education students value the freedom to plan and work at their own pace that this mode of study allows, they do not also value opportunities for contact of an academic and personal nature. They are not a group of isolates and this study, in line with previous research findings, shows that only a relatively low percentage of external students would study wholly in this mode by choice.

Presumably distance education would be a more acceptable way to study by a number of students if feelings of isolation could be overcome. This could be achieved by a reconsideration of current delivery systems, both central and regional.

The essential problem to be overcome with central systems is *access* to lecturers or tutors who can speak with authority about the course content and provide assistance with student academic difficulties. The essential problem with regional services is not currently one of access but location of *appropriate staff* and *appropriate resources* in the regions.

The resource problem may be overcome either by provision of more information about resources held centrally together with a more efficient delivery system, or by more extensive distribution of resources to regional centres.

Communication with other students and staff could occur either face-to-face in regional centres, by electronic media either in regional centres or centrally, or at large group meetings on campus or in regional centres.

Section 9 of this report proposes a model student support system that could accommodate the needs of distance education providers and students, ranging from those in isolated/remote communities to those in large cities. Implementation of the model is based upon the use of joint institutional staff appointments in regional centres, the sharing of resources e.g. computers and the use of study centre locations e.g. TAFE colleges, tertiary institutions, education centres on a user pays basis. Such a model is seen not only as a more efficient and cost effective method of student support but also makes possible the provision of a range of resources for and services to students that otherwise may not be possible. This applies particularly to student access to new communication technology for student-student and student-staff communication, for computing and for the use of data bases.

An important feature of the model is its focus on the provision of mechanisms or means of enhancing student communication with institution staff and students rather than merely on the provision of a physical facility. Further, whilst the model could serve as a basis for a national study centre network, it recognises that a study centre in

any one region needs to be able to effectively cater for and respond to regional needs. In this context a study centre must therefore be seen as a relatively dynamic entity that is able to efficiently and cost effectively respond to student, institutional and community needs and demands for a range of study centre functions described elsewhere in this report.

10.2 Recommendations

This study has demonstrated that study centres do provide important as well as alternative opportunities for student access to the delivery systems in distance education but are currently under-utilised.

R1 *All distance education providers should give greater consideration to the use of study centres as a means of increasing student access to educational opportunities.*

R2 *Further research is needed to determine how institutions can make more effective use of study centres for student support.*

The provision of student services and facilities available through study centres can be made more efficient and cost effective through increased cooperative arrangements between distance education providers and by community participation.

R3 *Distance education providers should all have a commitment to participate in the use of study centres for the delivery of distance education courses.*

Evidence from this report and other available literature on study centres indicates that a key element in the success and high level of usage of the centre depends on the availability of trained support staff and community support.

R4 *In the establishment and maintenance of study centres distance education providers should staff centres with trained personnel and also involve the community in study centre functions to ensure that the centre properly cater for the needs that it is intended to serve.*

The use of new communication technologies for distance education, particularly satellite telecommunications applications, has the potential to considerably enhance access, speed of delivery and possibly the effectiveness of educational services. Study centres have a key role to play as a facility for the introduction and trialling of new technology and communications applications that are either not affordable or accessible to students.

R5 *A national study centre network should be established that will enable the provision of educational opportunities and access to high quality education programs for students, particularly in remote locations, and be used as a means for the introduction and trialling of new educational technology and communications applications (e.g. satellite use).*

Costing data presented in this report suggests that direct recurrent costs of study centres can be minimised by utilisation of existing facilities and structures rather than developing separate facilities. Whether this difference in costs would be reflected in total recurrent unit costs of study centres is unresolved and should be a subject of future investigation.

R6 *Further research should be conducted on study centre costing to obtain the measurement of non-direct costs and, if necessary, to prorate these costs on the basis of staffing, student load etc. as required by the principle of absorption costing of activities.*

Distance education cost studies are needed to examine the nature and extent of the inter-relationship between study centre and residential school costs. In particular, any future comparative study of residential schools and study centres should also consider capital costs and relative effectiveness of the two strategies.

R7 *Further research should be undertaken into the relationship between the use of residential schools and study centres and their relative efficiency and effectiveness.*

This report and many other available publications provides ample information on the specific use of study centres for student support. However, study centres constitute a subset of the total student support system for Australian higher education external studies. This research found that study centre costs constitutes only approximately 1.5% to 2% of total recurrent expenditure per EFTSU and a utilisation level of about 50%.

R8 *Further systematic and ongoing research should be directed towards the development of student support systems, of which study centres are an integral component, and take into account aspects such as:*

- *cooperative provision and use of centres*
- *funding arrangements (allocation of costs)*
- *application of communications technologies*
- *linking (networking) arrangements of centres*
- *services and staffing scenarios for centres.*

It is clear from this report and other available Australian literature that the term "study centre" is a misnomer as they are minimally used for study purposes.

R9 *Instead of the term "study centre" a more appropriate term for off-campus locations for student support is "distance education access centre" (DEAC).*

SECTION 11

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11 REFERENCES

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SECTION 12

APPENDICES

APPENDIX A

STUDENT QUESTIONNAIRE

Dear Student,

The Capricornia Institute, Rockhampton has been selected to be part of a national survey to study the 'Use and effectiveness of Study Centres'. The survey will involve six major tertiary external studies providers.

This puts you in a most important position! Your views are being sought concerning the use of study centres for learning at a distance.

I would like you to spend around 15 minutes completing the form and reflecting on your experience in your External Studies course. Be as accurate as you can and please be honest with your comments. Your name is not recorded anywhere on the survey and your responses will be completely anonymous.

Please try to return the form, in the envelope provided, by August .

Thank you for your participation.

Yours faithfully,

Director of External and Continuing Education

CAPRICORNIA INSTITUTE
STUDENT QUESTIONNAIRE

PERSONAL INFORMATION

For Questions 1 to 10 please place a tick (✓) in the box corresponding to the most appropriate response.

1. Which is your age group?

15–19 years	☐(1)	30–39 years	☐(4)
20–24 years	☐(2)	40–49 years	☐(5)
25–29 years	☐(3)	50 or more years	☐(6)

2. Are you

Female	☐(1)	Male?	☐(2)

3. What is your **current** marital status?

Single	☐(1)	Married	☐(2)	Other	☐(3)

4. How many dependent children do you support?

None	☐(0)	One	☐(1)	Two	☐(2)	Three	☐(3)
Four	☐(4)	More than four	☐(5)				

5. What is your main occupation group using one of the following categories?

Administrator, Executive, Manager	☐(1)
Armed Forces	☐(2)
Clerical/Office Staff	☐(3)
Communication/Transport	☐(4)
Farming, Fishing industry, Mining, Construction, Manufacturing	☐(5)
Health industry, Hospitals, etc.	☐(6)
Homemaker	☐(7)
Labourer	☐(8)
Professions	☐(9)
Production worker	☐(10)
Retired, Independent means	☐(11)
Sales, Shopkeeper, Sport and Recreation	☐(12)
Scientist/Engineer	☐(13)
Teacher/Lecturer	☐(14)
Technical Personnel	☐(15)
Tradesperson	☐(16)

6. What is your current employment status?

Full-time employment	☐(1)	Seasonal employment only	☐(3)
Part-time employment	☐(2)	Unemployed at present	☐(4)

7. What is the population of the city/town/settlement in which you live?

500,000 and over	☐(1)
250,000 to 499,999	☐(2)
100,000 to 249,999	☐(3)
50,000 to 99,999	☐(4)
20,000 to 49,999	☐(5)
10,000 to 19,999	☐(6)
1,000 to 9,999	☐(7)
< 1,000	☐(8)

8. What is your **highest** educational qualification? (For qualifications obtained overseas, estimate the Australian equivalent?)

I have no formal qualification	☐(1)
Intermediate/Junior School certificate/Year 10	☐(2)
Senior/Leaving School certificate/Year 12	☐(3)
TAFE/Business College/non-certified course	☐(4)
TAFE/Business College/CAE certificate or diploma	☐(5)
Trade certificate	☐(6)
Bachelor degree	☐(7)
Post-graduate diploma/honours degree	☐(8)
Masters degree	☐(9)
Ph.D./other doctorate	☐(0)

9. In which type of course are you currently enrolled?

TAFE certificate	☐(1)
TAFE Associate diploma	☐(2)
CAE Associate diploma	☐(3)
Diploma	☐(4)
Bachelor's degree	☐(5)
Post-graduate certificate	☐(6)
Post-graduate diploma	☐(7)
Post-graduate degree	☐(8)
Non award course	☐(9)

10. What is the name of the award for which you are currently enrolled e.g. Bachelor of Applied Science?

_____

11. How many semesters have you completed in this course?

1 2 3 4 5 6 7 8 9 10 11 12 13 14 semesters
more than 14 semesters _____ (please write in appropriate number).

VISITS TO STUDY CENTRES

For Questions 12 to 16 please place a tick (✓) in the box corresponding to the most appropriate response.

12. Which is your nearest study centre from the list below.

Brisbane	☐(1)	Mackay	☐(7)
Bundaberg	☐(2)	Maryborough	☐(8)
Cairns TAFE	☐(3)	Mt. Isa	☐(9)
Emerald	☐(4)	Nambour	☐(10)
Gladstone	☐(5)	Toowoomba	☐(11)
Gold Coast	☐(6)	Townsville	☐(12)

If none of the above study centres applies indicate your reasons

Resident in Queensland but too far from listed study centres	☐(13)
Interstate resident	☐(14)
Other (Please specify below)	
_____	☐(15)

If you could not respond to Question 12 move to Question 16.

13. How long would it take you to travel, by car, to the study centre from the p! ce you normally leave from?

0 - 10 minutes	☐(1)	41 - 60 minutes	☐(4)
11 - 20 minutes	☐(2)	61 - 90 minutes	☐(5)
21 - 40 minutes	☐(3)	90 minutes plus	☐(6)

14. On how many occasions have you visited this study centre since January 1987?

never	☐(0)	four times	☐(4)
once	☐(1)	five times	☐(5)
twice	☐(2)	6-10 times	☐(6)
three times	☐(3)	11-20 times	☐(7)
		more than 20 times	☐(8)

15. What were the reasons for your visits to study centres. You may tick (✓) more than one box.

to attend an orientation meeting	☐(1)
to attend a tutorial presented by a local tutor	☐(2)
to attend a tutorial presented by your course lecturer	☐(3)
to attend a meeting with a visiting lecturer	☐(4)
to take part in a teleconference meeting/telephone tutorial	☐(5)
to take part in a satellite conference	☐(6)
to use computing facilities	☐(7)
to use photocopying facilities	☐(8)
to use audiovisual facilities	☐(9)
to view a video	☐(10)
to have a quiet place to study	☐(11)
to use library facilities	☐(12)
to borrow library books	☐(13)
to collect study materials etc.	☐(14)
to seek course advice	☐(15)
other (**Please specify below**)	☐(16)
_____	☐(17)

16. At what times during the week is it usually most convenient for you to attend the study centre for activities or meetings. Place 1 in the box for 1st preference, 2 for your 2nd and 3 for your 3rd preference.

Week day daytime	☐(1)	Saturday p.m.	☐(6)
Week day 4-6 p.m.	☐(2)	Sunday a.m.	☐(7)
Week day 6-8 p.m.	☐(3)	Sunday p.m.	☐(8)
Week day 8-10 p.m.	☐(4)	None of these times	☐(9)
Saturday a.m.	☐(5)		

EVENTS AND FACILITIES AT STUDY CENTRES

For each of the following events or facilities do you think it would be worth your while to go to a study centre? Please circle the appropriate response.

		very worthwhile	worthwhile	probably not worthwhile	definitely not worthwhile	don't know
17.	To attend orientation meeting	1	2	3	4	9
18.	To attend tutorial by lecturer/course writer	1	2	3	4	9
19.	To attend tutorial by local tutor	1	2	3	4	9
20.	To attend teleconference/satellite programme	1	2	3	4	9
21.	To use the computer	1	2	3	4	9
22.	To borrow library books	1	2	3	4	9
23.	To read library books	1	2	3	4	9
24.	To use a library catalogue	1	2	3	4	9
25.	To use audiovisual equipment	1	2	3	4	9
26.	To do photocopying	1	2	3	4	9
27.	To do private study	1	2	3	4	9
28.	To have a study group meeting with other students only	1	2	3	4	9
29.	To receive counselling before deciding which course or subjects to enrol in	1	2	3	4	9
30.	To complete application forms	1	2	3	4	9
31.	To complete re-enrolment forms	1	2	3	4	9
32.	To seek advice about administrative requirements of institutions	1	2	3	4	9
33.	To attend a study skills course	1	2	3	4	9
34.	To attend a social function	1	2	3	4	9

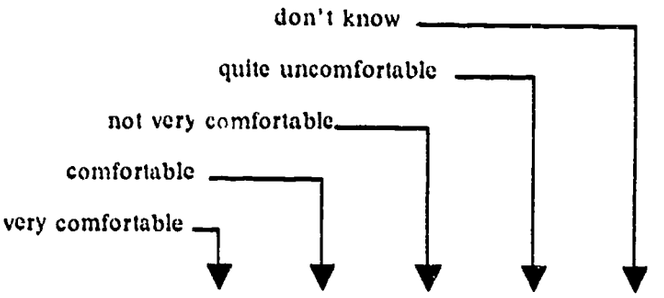
Please rate the following features and facilities in study centres.

35.	Night lighting/security	1	2	3	4	9
36.	Parking space	1	2	3	4	9
37.	24 hour access to facilities	1	2	3	4	9
38.	Microcomputers	1	2	3	4	9
39.	Photocopiers	1	2	3	4	9
40.	Access to staff during office hours	1	2	3	4	9
41.	Staffing in the evening and at weekends	1	2	3	4	9
42.	Within $^1/_2$ hr from home	1	2	3	4	9
43.	Teleconference facilities	1	2	3	4	9
44.	Facsimile machine	1	2	3	4	9
45.	A terminal for sending electronic mail	1	2	3	4	9
46.	Library catalogue	1	2	3	4	9
47	Library books covering each subject	1	2	3	4	9
48.	A place for private study	1	2	3	4	9
49.	A place that has tea/coffee making facilities	1	2	3	4	9

50. Are there any other services, activities or facilities which you think ought to be provided at a regional college? Please specify below.

COMMUNICATIONS

Which of the following forms of communication do you feel comfortable with? Please circle the most appropriate response(s).



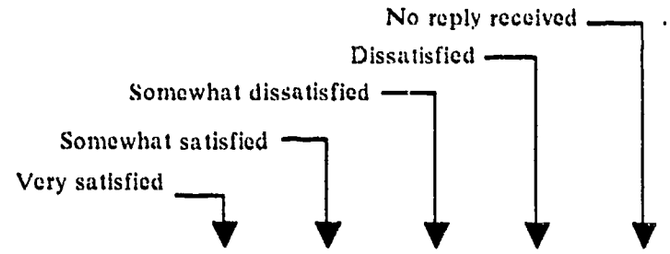
51.	Face-to-face	1	2	3	4	9
52.	Personal written correspondence	1	2	3	4	9
53.	Telephone, one-to-one	1	2	3	4	9
54.	Telephone with several parties	1	2	3	4	9
55.	Face-to-face in a group	1	2	3	4	9
56.	Electronic mail via computer	1	2	3	4	9
57.	Facsimile mail via FAX machine	1	2	3	4	9

58. On how many occasions since January 1987 have you been contacted by your Study Centre Liaison Officer? ☐☐ times

On how many occasions this year have you made direct contact with your Study Centre Liaison Officer, DECE and lecturer? Please show number of contacts in boxes for **each** type of contact.

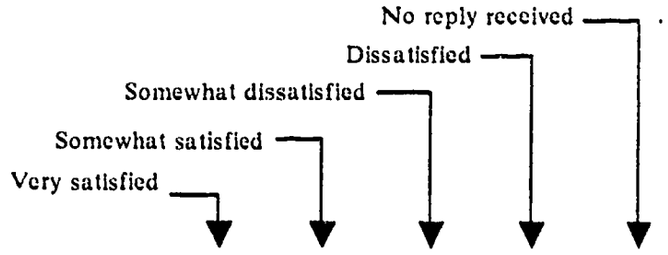
	Reason for Contact	SCLO	DECE	Lecturer
59.	Enrolment	☐☐	☐☐	☐☐
60.	Orientation	☐☐	☐☐	☐☐
61.	Mailing of study materials	☐☐	☐☐	☐☐
62.	Telephone/Satellite tutorials	☐☐	☐☐	☐☐
63.	Academic query	☐☐	☐☐	☐☐
64.	Assignment extension	☐☐	☐☐	☐☐
65.	Computer in study centre	☐☐	☐☐	☐☐
66.	Computer managed learning	☐☐	☐☐	☐☐
67.	Residential school	☐☐	☐☐	☐☐
68.	Textbooks	☐☐	☐☐	☐☐
69.	Library books	☐☐	☐☐	☐☐
70.	Study centre use	☐☐	☐☐	☐☐
71.	Examinations	☐☐	☐☐	☐☐

In general, were you satisfied with the **timeliness** of replies?Please place a (✓) corresponding to the most appropriate response.



72.	From SCLO	☐(1)	☐(2)	☐(3)	☐(4)	☐(5)
73.	From DECE	☐(1)	☐(2)	☐(3)	☐(4)	☐(5)
74.	From Lecturer	☐(1)	☐(2)	☐(3)	☐(4)	☐(5)

In general, have you been satisfied with the **content** of the replies to your enquiries? Please place a (✓) corresponding to the most appropriate response.



75.	From SCLO	☐(1)	☐(2)	☐(3)	☐(4)	☐(5)
76.	From DECE	☐(1)	☐(2)	☐(3)	☐(4)	☐(5)
77.	From Lecturer	☐(1)	☐(2)	☐(3)	☐(4)	☐(5)

APPENDIX B

STUDENT DEMOGRAPHIC DETAILS

STUDENT DEMOGRAPHIC DETAILS

Age

The age of students is presented in Table 1. Clearly the vast majority of students are mature age and this trend is very similar in each of the six institutions.

Table 1
Age of Student

	% Response for Each Institution					
	A	B	C	D	E	F
15-19 years	0	4	2	8	1	7
20-24 years	9	11	7	18	12	20
25-29 years	26	19	25	23	15	21
30-39 years	43	50	48	37	45	35
40-49 years	20	14	16	12	19	13
>50 years	2	1	2	2	9	5

Gender

Table 2 shows that the gender mix across institutions is very variable. This can be directly attributed to the type of course available. Institutions A & E have a predominance of education/arts courses which traditionally have a high level of female enrolments. Similarly institutions C & D course profiles contain a high number of science, engineering and business courses which in the external mode traditionally have a high level of male enrolments.

Table 2
Gender of Student

	% Response for Each Institution					
	A	B	C	D	E	F
Female	68	50	35	35	66	53
Male	32	50	66	65	34	47

Marital Status of Students

Table 3 shows that most students are married and that this trend was typical for each institution.

Table 3
Marital Status of Students

	% Response for Each Institution					
	A	B	C	D	E	F
Single	20	26	22	32	23	30
Married	77	68	74	65	70	61
Other	4	7	4	4	7	8

Number of Dependents

The % of students with dependent children is very similar at each institution as shown in Table 4. Approximately 50% of students have no children and the remaining population of students have 1-3 dependent children. Approximately 50% of students with dependents had 2 children.

Table 4
Number of Dependents

	% Response for Each Institution					
	A	B	C	D	E	F
None	45	44	42	51	46	52
One child	12	13	14	13	15	12
Two children	24	22	29	19	25	25
Three children	14	14	12	12	10	9
Four children	4	4	3	3	3	1
More than four children	1	1	1	1	2	1

Occupation

Details of student occupation are presented in Table 5. Four broad grouping of occupations account for the majority of students: teacher/lecturers; high and low level administrative personnel; science/engineer professions; homemaker.

Prominent differences in the range of occupations occurring at different institutions can be directly attributed to the courses available at each institution. For example, Institution A specialises in teacher education and hence the high percentage occupation for teacher/lecturer. Institution E has mainly external arts and education courses, hence an expected high proportion of teachers/lecturers as students. Institution C has a higher percentage of science and mathematics courses than any of the other institutions, hence the higher percentage of enrolments from the science and technical personnel occupations.

Table 5
Occupation

	% Response for Each Institution					
	A	B	C	D	E	F
Administrator, Executive, Manager	5	17	14	14	9	9
Armed Forces	0	1	2	1	1	2
Clerical/Office Staff	0	15	12	20	6	20
Communication/Transport	0	1	2	4	1	1
Farming, Fishing, Industry, Mining, Construction, Manufacturing	1	8	6	6	2	5
Health Industry	0	8	9	3	4	8
Homemaker	8	11	6	7	19	15
Labourer	0	1	0	0	1	5
Professions	12	9	8	0	0	4
Production Worker	0	0	0	8	12	8
Retired, Independent Means	0	1	1	0	2	0
Sales, Shopkeeper, Sport & Recreation	0	2	3	2	0	8
Scientist/Engineer	0	4	11	3	4	0
Teacher/Lecturer	83	22	8	14	40	5
Technical Personnel	1	2	14	9	0	7
Trades Person	0	1	4	7	0	4

Employment Status

Details of employment status are presented in Table 6. A very similar pattern emerges at each institution. Approximately 80% of students are full-time employed; approximately 10% have part-time employment and 10% are unemployed.

Table 6
Employment Status

	% Response for Each Institution					
	A	B	C	D	E	F
Full-time employment	84	77	86	83	70	68
Part-time employment	7	10	5	10	14	13
Seasonal work only	0	1	1	0	1	2
Unemployed at present	8	12	8	6	15	11

Population of Student's Place of Residence

The population of the student's place of residence in Table 7 shows that the majority of students (~75%) in the sample reside in country towns. A significant proportion of students reside in towns with populations less than 10,000. When interpreting this data it is important to keep in mind that the population excluded students residing in the metropolitan area of the main campus. As institutions A, B & E are located in capital cities, the % of students in this category from these institutions is naturally very low.

Table 7
Population of Student's Place of Residence

	% Response for Each Institution					
	A	B	C	D	E	F
500,000 and over	1	1	26	26	4	13
250,000 to 499,999	3	0	3	2	3	8
100,000 to 249,999	6	0	8	8	10	43
50,000 to 99,999	22	0	16	12	21	4
20,000 to 49,999	15	24	15	14	10	2
10,000 to 19,999	12	21	8	8	9	0
1000 to 9,999	29	37	19	22	27	16
Less than 1,000	13	17	6	8	13	7

Students Highest Qualification

It can be seen from Table 8 that a very wide spectrum of qualifications occurs amongst this sample of external students. The % response for each category of qualification at each institution is to a large extent a function of the type of courses (certificate, associate diploma, degree, postgraduate degrees) available for study and the student entry requirements for these courses. For example, Institution A specialises in teacher upgrading courses and the prerequisite for these courses is a 3 year diploma of teaching. Further, Institution F is a TAFE College and most of its courses are at the certificate level, many of which require either no formal qualification or only schooling to Year 10 for entry.

Table 8
Students Highest Qualification

	% Response for Each Institution					
	A	B	C	D	E	F
No Formal Qualifications	0	2	1	1	0	10
Intermediate/Junior School Certificate/Year 10	1	4	8	5	2	15
Senior/Leaving School Certificate/Year 12	2	30	26	43	22	36
TAFE Etc. Non-Certificate	0	1	1	2	1	2
Certificate/Diploma	78	23	18	27	31	15
Trade Certificate	2	6	9	9	2	13
Bachelor Degree	9	22	28	12	28	7
Postgraduate Diploma/ Honours Degree	8	11	6	2	13	2
Masters Degree	0	1	3	0	1	0

Students Current Course

Table 9 provides details of the types of courses presented at each institution. It can be seen that each of the institutions offer a wide range of courses and that advanced education institutions all have an emphasis on bachelor and postgraduate degree courses whilst the sole TAFE institution offers mainly certificate and non-award courses.

Table 9
Students Current Course

	% Response for Each Institution					
	A	B	C	D	E	F
TAFE Certificate	0	0	0	0	0	59
TAFE Associate Diploma	0	0	0	0	0	7
CAE Associate Diploma	8	11	45	22	0	2
Diploma	0	9	0	4	0	1
Bachelor Degree	74	61	29	64	86	1
Postgraduate Diploma	19	29	27	10	12	3
Non-Award	0	0	0	0	2	28

Semesters of Study Completed by Students

Details of the numbers of semesters of study completed by students are presented in Table 10. As the data was collected in September the response for completion of one semester of study represents students in their first year of study; the response for completion of two or three semesters means that students are either in their 2nd or 3rd year of study and so on. It is not possible, without detailed information, to interpret student success rate because of the length of study required for different courses e.g. BEd and Graduate Diploma course tend to be 2 years duration by external study; Associate Diploma and Certificates 4 years; Bachelor degree e.g. BA and BAppSc 6 years. However, it is possible to make some general conclusions from the results in conjunction with other data obtained from the study. These are:

(a) a considerable proportion of students (>25%) take more than the prescribed time to complete a course;

(b) greater than 30% of BAppSc and BA students do not complete their course of study;

(c) BEd courses compared to other courses have very high >80% completion rate.

Table 10
Semesters Completed

	% Response for Each Institution					
	A	**B**	**C**	**D**	**E**	**F**
One semester	26	33	43	44	20	42
Two semesters	12	5	4	4	4	16
Three semesters	31	18	19	16	12	14
Four semesters	9	5	3	4	7	3
Five semesters	11	9	11	10	15	5
Six semesters	5	4	3	2	5	1
Seven semesters	4	3	7	9	7	4
Eight semesters	1	4	1	2	4	3
Nine semesters	0	4	4	3	7	1
Ten semesters	1	5	0	1	5	1
Eleven semesters	0	1	2	2	2	1
Twelve semesters	0	3	1	0	3	0
Thirteen semesters	0	3	0	1	4	0
Fourteen semesters	0	1	1	0	3	2
Greater than fourteen semesters	0	0	1	0	3	4

APPENDIX C

STUDENT INTERVIEW SCHEDULE

Cost and Usage of Study Centres *Interview Schedule*

Introduction

The purpose of this interview is to try to understand how external students go about their study. In particular we are interested in which of the various services provided by your institution you mostly use and how you use these services.

We would also like to get some ideas from you about what would be an ideal combination of services to best support you in your study.

We anticipate that the interview will last about 45 minutes and we would like to tape record it so that we have an accurate record of our discussion. If you want to make any comments "off the record" please make them after the interview has concluded when the tape will be turned off.

The interview tapes will be available only to the researchers in this project. At the end of the project we will write a report which will go to CTEC (Commonwealth Tertiary Education Commission) with recommendations for planning better support services for external students throughout Australia.

At no stage will you be identified by name in the report. The kind of identification that might occur is "Female/Male student studying B.A./B.Com." and so on.

In writing the report we would like the opportunity to quote short extracts from some of the interviews where they illustrate a point very well.

I would like to ask you now whether you are completely happy to participate in the interview on this basis? _____

Do you have any reservations about the interview procedures or any questions that you would like to ask about the project in general before we start?

_____

General Questions

Q1. First of all, would you mind telling me a bit about your present commitments in addition to your external study?

Work Commitments _____

_____

Family Commitments _____

_____

Social Commitments _____

_____

Community Commitments _____

Cost and Usage of Study Centres *Interview Schedule*

Sport

Other Study

Other

Q2. Are you just getting started on this qualification or have you been doing it for some time?

Years of Study

Comment

Q3. Have you ever been an on-campus student?

no _____ yes _____ when _____ where _____

Q4. If yes, could you tell me a bit about your experiences as an on-campus student? Was it a good way to study for instance?

Q5. How did it come about that you enrolled as an external student?

Q6. Would you like to make some comments about what you like best about being an external student and what you like least about it.

best aspects

_____

_____

least liked aspects

_____

_____

Q7. On balance which method of study would you undertake if you could?

on-campus full-time _____

on-campus part-time _____

external only _____

mixed mode (i.e. some study on-campus and some study external) _____

_____

Q8. Could you tell me a bit more about why you would chose this method?

_____

_____

Services and Facilities for External Students

Coming now to the services and facilities which are available to you as an external student, could we talk first of all about the *Study Materials* that are sent to you by your institution.

Q9. For instance, can you tell me what kinds of study materials were sent to you in semester one this year?

(Interviewer please note that there may be some differences in terminology)

Subject Outline	___	Computer diskettes	___
Study Guides	___	Past exam papers	___
Workbooks	___	Revision questions	___
Lecture Notes	___	Assignment questions	___
Readings	___	Other _____	
Audiotapes	___		
Videotapes	___		

Q10. How important are the study materials which are sent to you in your study compared with other experiences you have had, such as face-to-face lectures in study schools or week-end seminars, tutorials, talks with other students, materials which you seek out for yourself and so on?

Could we talk for a little while now about the other services which your institution offers and how you use them.

Q11. Did you have any contact at all with the lecturers in your subjects in first semester?

Q12. If no, why was that?

Q13. Did you generally initiate the contact or did the lecturer initiate the contact or was it a bit of both?

Q14. What method did you use to communicate with your lecturer?

face-to-face, one-to-one	
face-to-face tutorial situation	
lecture situation	
telephone tutorial	
telephone one-to-one	
letter	
electronic mail	
FAX	
other	

Q15. Which of the above kinds of communication with your lecturer do you think you would feel most comfortable with given the way you usually like to communicate with people?

Q16. Do you generally feel that your lecturers as remote and distant from you or that they are people who are friendly and easy to deal with?

Q17. Are there other people in the institution with whom you have a fair bit of communication? Who are they?

(Interviewer please note that these may be some differences in terminology)

Librarians?	——	Other lecturers?	—
Administrators?	——	Tutors?	—
Academic counsellors?	——	Other?	—

Q18. How useful were these contacts to you in your study? _____

_____

Q19. Have you experienced any particular problems in communicating with staff of your institution?

(a) On the main campus _____
(b) In your own region _____

Q20. Do you have a strong preference for dealing with staff who are on the main campus over staff in the regions or vice versa? _____

Q21. Why is that?

_____

_____

Q22. Do you have a strong preference for communicating with staff of the institution over communicating with other students or vice versa? _____

Q23. Why is that?

_____

_____

_____

Q24. Were there other people outside the institution that you called on to help with your study?

_____

Q25. Would you say that you really feel you belong to the institutions even though you are an external student? _____

Q26. Could you expand on that a little?

_____

Cost and Usage of Study Centres *Interview Schedule*

Q27. With regard to services and facilities in your region did you have any contact at all with a local study centre in first semester?

Q28. If no, why was that?

Q29. If yes, did someone from the centre contact you or did you initiate the contact or both?

Q30. What kind of contact did you have?

Visit to center _____
Telephone _____
Correspondence _____
Other _____

Q31. Who are the people you would most often see in the center?

(Interviewer please note there may be some differences in terminology here)

Librarian _____
Officer in Charge or Regional Liaison Officer or similar person _____
Tutor _____
Other students _____
Other _____

Q32. Do you see the people who staff the Centre as remote from you or rather friendly and helpful? _____

Q33. Would you say that you have a strong sense of identity with your local centre, that you like going there or that its just a place that you visit when you have to?

Q34. Could you expand a bit on that? _____

Q35. At what time during the year or semester did you make most use of your local study centre? _____

APPENDIX D

INSTITUTIONAL COST QUESTIONNAIRE

Cost and Usage of Study Centres *Interview Schedule*

Q36. What are the main things that you look for in a regional Centre, that would make it a desirable place to visit?

Q37. What do you see as the major problem with your study centre at present?

Now lets talk a bit about methods of communication in general.

Q38. What would you say your feelings are about the various kinds of technology that are being used now for communication and for study purposes? I'm thinking of things like computers for learning, electronic mail, telephone tutorials, facsimile machines and the like?

Q39. Do you feel quite comfortable about using that kind of equipment or would you rather communicate with people face-to-face and by the usual methods like writing a letter or making a personal telephone call etc.?

Q40. Do you think the technology will make external study easier for people in the future or not?

Q41. Lastly, could you say something about the value of your experience as a student so far - the personal value I mean, quite apart from the qualification you are getting. Has it been a worthwhile experience overall?

DR RAJ. SHARMA
EXECUTIVE ASSISTANT, DIRECTORATE
PHONE 079-360513

21 August 1987

Dear

Re: Cost and Usage of Study Centre.

As you are probably aware Capricornia Institute together with six other Australian Tertiary Institutions have been commissioned by CTEC to undertake a relevant study on the "Cost and Usage of Off-campus Study Centres"(See Attachment 2).

A letter has been sent your Institutional Head for assistance on one aspect of the study, namely to identify the cost of providing facilities and resources at different study centres (including the use of TAFE facilities).

In this regard your support is sought to facilitate the completion of the Questionnaire.

Do not hesitate to contact me for any assistance of clarification.

Yours faithfully,

Dr Raj Sharma,
Executive Assistant

QUESTIONNAIRE INSTRUCTIONS

The following information is provided to facilitate the completion of the attached Questionnaire on Study Centres. Should you require any further clarification concerning any aspect of the Questionnaire please contact Dr. Raj Sharma, Capricornia Institute (Phone 079 360513).

EXPLANATORY NOTES

1. TYPES OF STUDY CENTRES

Researchers have identified the following five types of study centres:

Type 1 differs from Types 2 to 5 by the level and type of teaching and type of student.

Type 1. A centre where conventional teaching/tutoring is offered in support of study materials prepared elsewhere, to full-time and part-time students e.g. Mackay TAFE is used by Full-Time CIAE student.

Types 2 to 5 are all used to provide distance education support, such as teleconferences or occasional tutorials, to external students. The categories are distinguished by type of location.

Type 2. Study centres located within TAFE institutions e.g. Mt. Isa TAFE is used for local support by CIAE, DDIAE and the University of Queensland.

Type 3. Study centres located within the main campus of a CAE or University e.g. the Toowoomba campus of DDIAE is used to provide local support for external students enrolled with a number of providers including CIAE and DDIAE.

Type 4. A study centre which was developed by a distance education institution provided on an off-campus location e.g. Capricornia Institute's Gladstone Centre, University of Queensland Maryborough Study Centre.

Type 5. Study centres which are community based e.g. Bundaberg Centre for Higher Education.

2. PRESENTATION OF INFORMATION

Part 1 seeks certain organisation-wide information. Part 2 of the Questionnaire makes provision for presentation of details of costs, student use etc. for each type of study centre used by your institution. If any of the details are not available for each Study Centre then it is requested that this information is provided in Part 3 of the Questionnaire as a total expenditure of cost items for all study centres used by your institution – so a maximum of five (one for each type) Part 2 may be completed by you; four spare copies of this part are provided after Part 3. In Part 3 you are required to provide expenditure etc. resource data on all your study centre activities.

Direct costs

These are expenditure items for study centres which have been specifically budgeted for that purpose or which are identified by a separate cost account code. For example, at Capricornia Institute, the Gladstone study centre manager's salary cost is accounted for separately under the "Gladstone Centre" and hence can be deemed as being a direct cost of that study centre.

Non-direct costs

These are expenditure items which have not been costed in the accounting system to the study centre as a separate cost item. For example, at CIAE the Department of External and Continuing Education Rockhampton has a staff person responsible for study centre liaison and administration but the person's salary cost is not assigned to study centres. In this case we would allocate a proportion of staff salary in Question 2.1 to the particular study centre. Costs can be proportioned on the following basis (whichever is deemed relevant and where information is readily available):

- On the basis of proportion of staff time (particularly for salaries)
- Using proportion of student load (EFTSU or student hours)
- Using proportion of area occupied (particularly for capital costs)

Replacement Cost

This is the current price which must be paid to replace an item of equipment (either with an identical product or if superseded by the latest equivalent model).

3. CAPRICORNIA INSTITUTE EXAMPLE

In order to provide you further guidance in completing the cost portion of the questionnaire and achieving greater data consistency, attached is an example of items Capricornia Institute will include in its response for one of its study centres.

CAPRICORNIA INSTITUTE EXAMPLE OF COSTINGS

ITEM	DIRECT COST	NON-DIRECT COST
SALARIES		
• Academic	Staff appointed to take scheduled classes at the study centre (eg. Mackay centre) Salaries of Staff appointed to teach from a Study centre. (Non-scheduled classes, eg. Physics tutors).	Salaries of staff who make periodic visits to study centres for teaching purposes (calculated on the basis of time spent away from the parent campus).
• Non-academic	Liaison Officer, Library Staff Officer In Charge, payments.	Staff at parent campus responsible for the operation of the study centre network and associated activities (calculated on the basis of the percentage of the persons time spent on these duties; do not include minor staff contributions).
NON-SALARIES		
• Telephone and other communication charges.	Telephone and postage charges, electronic mail charges. (Communication costs only do not include cost of despatch of library or similar items).	
• Acquisition of library material.	costs of books, audio, video material. cost of microfiche or computer generated catalogues.	
• Rental	Rental of study centre premises.	
• Computer Maintenance	Cost of replacement components. Cost of freighting equipment to and from the centre. Travel costs to visit centres (maintenance and installation purposes only). Salaries of maintenance staff appointed according to time spent on study centre equipment.	
Light, Power and Fuel.		
Computer	Cost of students computer time paid by college. Cost of installation and rental of telephone line (if not used solely for mainframe access apportion costs according to uses).	Cost of retrieving computer charges from student.
Exam Supervision		hire charges (desks/chairs etc).
Freight and Cartage	Charges for the movement of goods to and from the centres other than computer hardware. ie. software, stationary, library materials.	
Computer Software	Software purchased or provided for placement in study centres.	cost of ordering, cataloguing, packaging and maintaining record of location (Staff Salaries).

ITEM	DIRECT COST	NON-DIRECT COST
Security	building security payments to security firms (do not include payments included in rental agreements). Special equipment eg. locks, magnetic card keys, wire mesh over windows.	
Stationery	Computer paper and print ribbons. Stationery provided to staff at centres.	
Travel	Travel and associated costs for training off-campus staff (ie training/orientation programs similar to DDIAE RLO's)	Cost of staff from parent campus visiting study centres for administrative reasons. Travel costs for staff visiting study centres for academic purposes.
Other Consumables	Study materials, Handbooks, Brochures and other promotional materials.	
Other Non-Salaries		
EQUIPMENT		
AV Equipment	OHP's, video player and monitor provided from college or student union funds.	
Computer	Modems, Microcomputers and Printers - provided for academics and administrative purposes.	
Furniture	Desks, chairs, blackboards, whiteboards, cupboards etc.	
Other	Teleconferencing equipment. Message recording machines Installation of telephone lines (do not include if already allowed for in computer charges).	

STUDY CENTRE QUESTIONNAIRE:

Part 1

This part of the questionnaire is in relation to all study centres utilised by your institution for external students. Please indicate your response to each of the following questions (do not hesitate to contact Dr. Raj Sharma on phone 079-360513 from the Capricornia Institute should you require any further clarification concerning either Part 1 or Part 2 or Part 3):

1. Name of Institution: _____

2. Contact person for follow-up to both parts of the questionnaire is

   Name: _____

   Phone No: _____

3. Using the previously specified typology of study centres please furnish the following information in respect of all study centres used by your institution as at 30th April, 1987 (do not include figures for other institutions using your study centre) and provide details for CTEC approved courses only.

STUDY CENTRE*	TYPE#	NUMBER OF STUDENTS WHO ATTEND CENTRE	NUMBER OF STUDENTS ENROLLED **

Notes

* Indicate name of the study centre, eg. Bundaberg centre for higher education.

\# Indicate a number from 1 to 5 from explanatory note 1 above as appropriate.

\• Please state the number of external students who are potential users of the centre.

PART 2

STUDY CENTRE DETAILS FOR EACH CENTRE:

A Specific Example of Each Study Centre Used

Complete a separate sheet for each study centre.

1. Study Centre Name: _____
2. Type of Centre: (indicate a number from 1 to 5 using typology in the Explanatory notes): _____
3. Number of Students attending the Centre in 1987: _____
4. Number of students enrolled in the Study Centre Region in 1987 : _____
5. Level of expected Use: _____

Based on your institutions philosophy and instructional approach in distance education please indicate level of expected use of study centres facilities as follows:

		don't know	definitely not used	unlikely used	heavily used	very heavily used by students
		↓	↓	↓	↓	↓
1.	Orientation meeting	1	2	3	4	5
2.	Tutorial by lecturer/course writer	1	2	3	4	5
3.	Tutorial by local tutor	1	2	3	4	5
4.	Teleconference/satellite programme	1	2	3	4	5
5.	To use the computer	1	2	3	4	5
6.	To borrow library books	1	2	3	4	5
7.	To read library books	1	2	3	4	5
8.	To use a library catalogue	1	2	3	4	5
9.	To use audiovisual equipment	1	2	3	4	5
10.	To do photocopying	1	2	3	4	5
11.	To do private study	1	2	3	4	5
12.	To have a study group meeting with other students only	1	2	3	4	5
13.	To receive counselling before deciding which course to enrol in	1	2	3	4	5
14.	To complete application forms	1	2	3	4	5
15.	To complete re-enrolment forms	1	2	3	4	5
16.	To seek advice about administrative requirements of institutions	1	2	3	4	5
17.	To attend a study skills course	1	2	3	4	5
18.	To sit for exams	1	2	3	4	5
19.	To attend a social function	1	2	3	4	5
20.	Other (please specify below)	1	2	3	4	5
	_____	1	2	3	4	5

ANNUAL EXPENDITURE DATA

Please provide 1985 and 1986 expenditure information in respect of this particular study centre as follows:

2.1 1985/86 Direct and non-direct costs of the study centre should be provided as follows:

	DIRECT COSTS 1985 $	DIRECT COSTS 1986 $	NON-DIRECT COST 1986 $	NON-DIRECT COST 1986 $
Salaries (including on costs)				
- Academic				
- Non-Academic				
Non-Salaries				
- Telephone and other communication charges				
- Acquisition of library material				
- Rental				
- Computer Maintenance				
- Light, Power and Fuel				
- Computer Charges				
- Exam Supervision				
- Freight and Cartage				
- Computer Software				
- Security				
- Stationery				
- Travel				
- Other Consumables				
- Other Non-Salaries.				
Equipment				
- A/V Equipment				
- Computer (Hardware)				
- Furniture				
- Other				
Capital				
- Building maintenance/Minor works				
- New building works				

2.2 Other Study Centre Information:

We wish to relate the expenditure figures provided in above Questions to the Number of External Students serviced by the Study centre. Accordingly please state the number of external students who are potential users of the centre or who reside within the study centre region (include approved courses only).

Year	No. of Students
1985	
1986	

2.3 Please provide the number of equivalent full-time staff employed by your institution to support the activities of the study centre in respect of 1985 and 1986 (as at 30 April) as follows:

	EFT STAFF	
	LOCATED AT CENTRE	NOT LOCATED AT CENTRE
Academic		
Non-Academic		
TOTAL		

PART 3
GENERAL STUDY CENTRE DETAILS

Complete Part 3 for all study centres used by your institution.

1. Study Centre Names:
2. Types of Centre (use typology provided in the Explanatory notes):
3. Number of students attending the Centres in 1987:
4. Number of students enrolled within the vicinity of Study Centres in 1987:
5. Level of Expected Use:

Based on your institutions philosophy and instructional approach in distance education please indicate level of expected use of study centre facilities as follows:

		very heavily used by students	heavily used	unlikely to be used	definitely not used	don't know
1.	Orientation meeting	1	2	3	4	9
2.	Tutorial by lecturer/course writer	1	2	3	4	9
3.	Tutorial by local tutor	1	2	3	4	9
4.	Teleconference/satellite programme	1	2	3	4	9
5.	To use the computer	1	2	3	4	9
6.	To borrow library books	1	2	3	4	9
7.	To read library books	1	2	3	4	9
8.	To use a library catalogue	1	2	3	4	9
9.	To use audiovisual equipment	1	2	3	4	9
10.	To do photocopying	1	2	3	4	9
11.	To do private study	1	2	3	4	9
12.	To have a study group meeting with other students only	1	2	3	4	9
13.	To receive counselling before deciding which course to enrol in	1	2	3	4	9
14.	To complete application forms	1	2	3	4	9
15.	To complete re-enrolment forms	1	2	3	4	9
16.	To seek advice about administrative requirements of institutions	1	2	3	4	9
17.	To attend a study skills course	1	2	3	4	9
18.	To sit for exams	1	2	3	4	9
19.	To attend a social function	1	2	3	4	9
20.	Other (please specify below)	1	2	3	4	9
	_____	1	2	3	4	9

CURRENT ANNUAL EXPENDITURE DATA

Please provide 1985 and 1986 expenditure information in respect of these study centres as follows:

3.1 1986/86 Direct and non-direct costs of the study centres should be provided as follows:

	DIRECT COSTS 1985 $	DIRECT COSTS 1986 $	NON-DIRECT COST 1986 $	NON-DIRECT COST 1986 $
Salaries (including on costs)				
- Academic				
- Non-Academic				
Non-Salaries /				
- Telephone and other communication charges				
- Acquisition of library material				
- Rental				
- Computer Maintenance				
- Light, Power and Fuel				
- Computer Charges				
- Exam Supervision				
- Freight and Cartage				
- Computer Software				
- Security				
- Stationery				
- Travel				
- Other Consumables				
- Other Non-Salaries.				
Equipment				
- A/V Equipment				
- Computer (Hardware)				
- Furniture				
- Other				
Capital				
- Building maintenance/Minor works				
- New building works				

3.2 Cost of replacement of following items currently held in the centre should be provided:

Building space $ _____
Library Resources $ _____
Equipment space $ _____
- Computers $ _____
- A/V Equipment $ _____
- Furniture $ _____
- Other $ _____

3.4 Please provide the number of equivalent full-time staff employed by your institution to support the activities of the study centres in respect of 1985 and 1986 (as at 30 April) as follows:

	EFT STAFF	
	LOCATED AT CENTRE	NOT LOCATED AT CENTRE
Academic		
Non-Academic		
TOTAL		

3.5 Other Study Centre Information:

We wish to relate the expenditure figures provided in above Questions to the Number of External Students serviced by the Study centre. Accordingly please state the number of external students who are potential users of the centre or who reside within the study centre region (include approved courses only).

Year	No. of Students
1985	
1986	

QUESTIONNAIRE ON COST SIMULATION OF STUDY CENTRES

The questionnaire assumes the following three scenarios:

(a) Scenario 1
Where the study centre is located in a TAFE institution (Type 2).

(b) Scenario 2
Where the study centre is located on a main campus of the University or College (Type 3).

(c) Scenario 3
Where the study centre is developed by a higher education institution off campus (Type 4).

(d) Scenario 4
Where community based facilities are used for study centre activity (Type 5).

The following assumptions are made regarding instituitonal functions/purposes to be discharged through the study centre based on data previously furnished by institutions:

(i) Attendance: 60 students will attend the centre from the higher education institution.

(ii) Purposes/Functions: principal functions include

* orientation meeting
* borrowing library books
* for students to take examinations
* study group meeting of students (no involvement of staff)

and occasional usage for tutorials, teleconferencing, using computers/audio-visual equipment to do photocopying/private study, student counselling, enrolment/application for courses and social function activities.

Please provide your responses to the following queries based on the above assumptions:

1. Usage:

The study centre facilities should be used for the principal functions with subsidiary activities being organized on main campus using residential schools or other similar vehicle (please tick one box under each Scenario).

	Scenarios			
	1	2	3	4
Strongly Agree				
Agree				
Disagree				
Strongly Disagree				

2. Building/Equipment Requirements:

(a) How many square metres of space will be required for the "model" study centre? (please state e.g. 50 square metres).

	Square Metres
Scenario 1	
Scenario 2	
Scenario 3	
Scenario 4	

(b) How likely is it that the above building space can be provided from existing resources? (Please tick one box from each Scenario).

	Scenarios			
	1	2	3	4
Highly Likely				
Likely				
Unlikely				
Highly Unlikely				

(c) Please list below the furniture and equipment required for the study centre e.g. 2 x desks, 5 x chairs etc.

3. Recurrent Cost of Study Centres:

Do you believe that the recurrent cost of the study centre will be $170.00 per student (June 1986 prices) or $11000.00 in total for the study centre?

	Scenarios			
	1	2	3	4
Yes				
No				

If you do not agree with the above figure, can you please provide an alternative costing (use June '86 cost levels or state, if different) - the following work sheet may be helpful in such a task:

	Costs ($) Scenarios			
Items	1	2	3	4
Telephone and other communication charges				
Acquisition of library material				
Rental				
Computer maintenance				
Light, power and fuel				
Computer charges				
Exam supervision				
Freight and cartage				
Computer software				
Security				
Stationery				
Travel				
Other consumables				
Other non-salaries				

APPENDIX E

STUDY CENTRE FACILITIES

QUEENSLAND

Location	Centre name	Library	Microcomputer and printer	Teleconferencing facilities	Photocopying facilities	Modem	Examination Centre	24 Hour Access
BRISBANE	Griffith University	Main ± collection	Yes	Yes	Yes	Yes	Yes	Yes
	St Laurence's College	Reference# collection	Yes	Yes	Yes	Yes	Yes	Yes
	McAuley College	Main ± collection	Yes	Yes	Yes	Yes	Yes	Yes
BUNDABERG	Bundaberg Centre for Higher Education	Reference# collection	Yes	Yes	No	No	Yes	Yes
CAIRNS	Cairns College of TAFE	Reference# collection	Yes	Yes	Yes	No	Yes	No †
	University Centre	Reference collection	Yes	Yes	No	No	Yes	No
DALBY	Dalby Education Centre	Reference collection	Yes	Yes	No	No	Yes	No
EMERALD	Central Highlands College of TAFE	Reference collection	Yes	Yes	Yes	No	Yes	No †
GLADSTONE	Capricornia Institute Gladstone Centre	Off-campus# collection	Yes	Yes	Yes	Yes	Yes	Yes
GOLD COAST	Gold Coast College of TAFE	Reference# collection	Yes	Yes	Yes	No	Yes	Yes
IPSWICH	Ipswich Education Centre	Reference collection	Yes	Yes	Yes	No	Yes	Yes

Location	Centre name	Library	Microcomputer and printer	Teleconferencing facilities	Photocopying facilities	Modem	Examination Centre	24 Hour Access
MACKAY	University Centre	Reference# collection	Yes	Yes	Yes	Yes	Yes	Yes
MARYBOROUGH	Maryborough and District University Centre	Reference# collection	Yes	Yes	Yes	No	Yes	Yes
MOUNT ISA	Mt Isa College of TAFE	Reference# collection	Yes	Yes	Yes	No	Yes	No†
NAMBOUR	University Centre	Reference# collection	Yes	Yes	Yes	No	Yes	Yes
REDCLIFFE	Redcliffe Education Centre	Reference collection	Yes	Yes	Yes	No	Yes	No†
ROCKHAMPTON	Capricornia Institute	Main ± collection#	Yes	Yes	Yes	Yes	Yes	Yes
ROMA	Roma Education Centre	Reference collection	Yes	Yes	Yes	No	Yes	No
TOOWOOMBA	Darling Downs IAE	Main ± collection	Yes	Yes	Yes	No	Yes	Yes
TOWNSVILLE	James Cook University of North Queensland	Main ± collection	Yes	Yes	Yes	No	Yes	Yes
WARWICK	Warwick Education Centre	Reference collection	Yes	Yes	Yes	No	Yes	No

VICTORIA

Location	Centre name	Library	Microcomputer and printer	Teleconferencing facilities	Photocopying facilities	Modem	Examination Centre	24 Hour Access
COLAC	Colac Technical College	Main ± collection	Yes	Yes	Yes	Yes	Yes	No
GEELONG	Gordon Technical College	Main ± collection	Yes	Yes	Yes	Yes	Yes	No

WESTERN AUSTRALIA

Location	Centre name	Library	Microcomputer and printer	Teleconferencing facilities	Photocopying facilities	Modem	Examination Centre	24 Hour Access
ALBANY	Great Southern Regional College	Main collection ±	Yes	Yes	Yes	Yes	Yes	No
BUNBURY	Bunbury TAFE	Main collection ±	Yes	Yes	Yes	Yes	Yes	No
	Bunbury Institute of Advanced Education	Maih collection ±	Yes	Yes	Yes	Yes	Yes	No
GERALDTON	Geraldton Regional College TAFE	Main collection ±	Yes	Yes	Yes	Yes	Yes	No
HEDLAND	Hedland College	Main collection ±	Yes	Yes	Yes	Yes	Yes	No
KALGOORLIE	Kalgoorlie College	Main collection ±	Yes	Yes	Yes	Yes	Yes	No
	Kalgoorlie School of Mines	Main collection	Yes	Yes	Yes	Yes	Yes	No
KARRATHA	Karratha College	Main collection ±	Yes	Yes	Yes	Yes	Yes	No
NEWMAN	Newman Annexe	Main collection ±	Yes	Yes	Yes	Yes	Yes	No
TOM PRICE	Tom Price Annexe	Main collection ±	Yes	Yes	Yes	Yes	Yes	No

\# A copy of the library microfiche catalogue is located at study centres.

± Students have reciprocal borrowing arrangements with these institutions.

† 24 hour access by arrangement