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# Regional University Access: A Case Study from the South West

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#### Abstract

Access to appropriate training is a key to developing human resources and enhancing quality of life in regional areas. Yet like many other service providers, universities are faced with the high costs of delivering services in regions with a small and scattered client pool. Thus, the challenge: how can universities serve regional communities and promote regional development while remaining cost effective and sustainable? Distance education technologies appear to offer a solution, yet they may fail to respond to the on-the-ground needs of regional students.

In late 2000, Edith Cowan University commissioned a study to consider the challenge of regional service delivery, in the context of the Warren-Blackwood region of South West Australia. This isolated, inland region has been undergoing economic displacement in the wake of timber industry restructuring; improved training access has been identified as a regional-development priority (Warren-Blackwood Action Plan, 2000). This paper presents the results of the study examining the demand for, and delivery of, university services in the Warren-Blackwood region.

Surveys, focus groups and interviews with students and former students highlighted key trends, such as the pre-university (Year 10) exodus of youth from the region and the tendency for regionally based students to be mature-aged. The paper identifies challenges, both logistical and psychological, facing people who undertake long-distance university studies (whether as distance or commuting students). Finally, the paper suggests low-cost ways to facilitate the learning experience of students based in regional areas, by understanding the culture of learning and providing access to basic support resources, regardless of the technological sophistication of course delivery.

#### Introduction

A well-documented connection exists between educational achievement, labour market participation and later socio-economic status. Education is therefore one of the key 'equity' issues. (McKenzie, 1990)

This paper addresses the need for access to quality tertiary education for regional and rural residents. Currently, universities in Australia face a tension between the desire to serve regional communities and the costliness of providing services to thinly populated areas. Access to metropolitan campuses is often difficult or impossible for people living in regional areas, yet the availability of quality education is a key ingredient in regional development.

Distance education technologies appear to offer a solution to universities that would reach out to rural and regional students; as Oblinger and Rush (1997) write:

The on-line experience allows colleges and universities to project themselves far beyond their physical locations. Already, hundreds of institutions offer courses on-line. Perhaps more appropriate for adult learners than the average 18-year old freshman, on-line experiences offer educational opportunities to millions of learners constrained by time, location or other factors.

On-line learning, and the wide variety of other distance technologies, present considerable opportunities. Yet an onthe-ground analysis of students' own needs and experiences is necessary if such technologies are to be used most effectively to meet the needs of regional and rural Australian students.

This paper presents results from a recent study of university students and university service delivery in the Warren-Blackwood region, an isolated, inland region of South Western Australia. The study focuses on both distance education and commuting students living in the region, of all ages. These are all referred to as long-distance

<sup>&</sup>lt;sup>1</sup> This study was carried out for Edith Cowan University's Learning and Future Technologies Unit between 15 September and 25 October 2000, by the author with assistance from researchers Viti Simmons and Bernard Humphries. It involved oral and written surveys of community members with experience in long-distance tertiary education, and of local high school and TAFE students.

students' - whether they commute to campus or study externally. The study considers how local people in this region are currently accessing university-level training despite geographical isolation, the obstacles they face, and their recommendations for more effectively providing university services to rural and regional areas.

The distance education formats currently available in the Warren-Blackwood region range from traditional postal correspondence with campuses, to e-mail correspondence and use of university websites. On-line courses are available with universities from outside the region, and televised courses are offered by TAFE. The regionally based campus of Edith Cowan University, located in the city of Bunbury (between one and three hours' drive from the communities studied), does not currently offer on-line courses or region-specific outreach to the Warren-Blackwood region (e.g., on-site courses in communities). This study was designed to assist the university to design an appropriate and sustainable outreach strategy which would respond to the needs of the region's students.

The results of this study suggest low-cost ways to facilitate the learning experience of regional and rural students. The study also identifies some of the key limitations of distance-education technologies in responding to the on-the-ground needs of students. A key need identified by this study is for tertiary institutions to understand the culture of learning and provide access to basic support resources, regardless of the technological sophistication of course delivery.

## The Warren-Blackwood Region: Geographic Considerations

The Warren-Blackwood Region of South Western Australia comprises the shires of Manjimup (towns of Manjimup, Northcliffe, Pemberton and Walpole), Nannup, Bridgetown-Greenbushes, and Boyup Brook, with a combined population of just over 17 500 people in an area of about 14 000 square kilometres.

This study region has been chosen due to its isolation from the South West's main regional centre (Bunbury), its relatively low socio-economic indicators and inland location, as well as the current interest in this area due to timber-industry restructuring. The region is known for its hardwood forests (karri, jarrah, and marri) and is also home to a plantation timber industry (pinus radiatus and other varieties). Primary industries underpin the Warren-Blackwood region, which is going through a period of considerable change as a result of the Regional Forest Agreement (RFA). Timber mill closures are expected to continue, striking at the heart of the region's most stable traditional industry. New alternatives are being sought, and a skilled and educated population is key.

Improved training access has been identified as a regional-development priority by the Warren Blackwood Regional Development Action Plan (2000). Geographic isolation is a key constraint to obtaining training for the people in the region; the nearest university campus is located in Bunbury, over an hours' drive away (as much as three hours from some areas). Local TAFE offerings are available but limited by the difficulty in achieving minimum student numbers. Bus transport is available between Bunbury and some of the region's centres, but is often inadequate due to schedules and rural students' distance from town. Nor does Manjimup, the region's main town, offer a viable alternative, and the region's residents tend to look outside the Warren-Blackwood region for educational and commercial services.

#### **Edith Cowan University students**

Edith Cowan University (ECU) has four campuses: three in metropolitan Perth, and a regional campus based in Bunbury. In late 2000, there were 23 active ECU students from the Warren-Blackwood region. This compares with a total student body on the Bunbury regional campus of nearly 1 000. Very few people from the Warren-Blackwood region are accessing their region's nearest university campus.

Three-quarters of ECU students from the Warren-Blackwood region study on campus at the Bunbury campus (they are 'internal' commuting students). The remaining quarter study mixed-mode or externally. Despite the commuting distances involved, purely external study is not a popular option; however, one student recently shifted from internal to external study due to petrol prices.

Students interviewed  $^2$  identified the main challenges to studying externally as:

self motivation;

not having anyone to discuss ideas with (isolation);

difficulties that arise when you are not on-line and lack computer access;

lack of lecturer contact;

having to read through all the material (rather than listening to lectures);

understanding the material;

obtaining research material for assignments; and

accessing text books

Nearly all ECU students tend to be computer literate but only about half of ECU students have computer access from home. Computer facilities and Internet access are available in the smaller communities through telecentres (Manjimup, however, does not have a telecentre).

#### a. Student characteristics -

Students from the region study in a broad range of the degree programs offered by ECU's Bunbury campus. There is a strong concentration of visual arts students in one town, Bridgetown, all eight of whom commute to Bunbury campus. The remainder of students are spread across a range of fields: Nursing, Social Science, Education, Business, Psychology, Generic Arts and Computer Science.

The majority of students from the region are mature-aged; among students interviewed, the average age was 31 years; two students were in their fifties, while four were aged 20 or under. More than half of the students are from Bridgetown (about one hour from Bunbury). None are from Walpole, Nannup or Northcliffe. Two students had moved out of the region and are living in or near Bunbury.

Less than half (43%) of current students from the region mentioned career or employment prospects as primary reasons they had chosen to study. Most (57%) chose to study because of specific interest in the field or a general interest in learning and furthering their education. There was no clear distinction in the choice of fields between those who had chosen to study mainly for employment prospects and those who chose to study from interest. One key reason why these students chose ECU was because of its location, being the closest university to their area.

Only two of the fourteen students interviewed had been working full time before commencing study at ECU; the remainder had been doing part-time or seasonal work or other studies. Eight currently work, most in part-time or seasonal/casual work. Most of the students were very clear about their goals and what they planned to do upon completion of their degree.

#### b. The study experience

Students from the region spend an average of twenty-seven hours per week studying, ranging from as little as ten to as much as fifty. One external student commented that she had fifteen hours a week to dedicate to study whether she did one unit or three; therefore she preferred to take one unit at a time and do well rather than poorly. Another student commented that "very little separates one's life" from her art course. Seventy-nine percent of students found the current time they were spending on their studies "acceptable" and "manageable".

Students identified their most important contact people for their studies as: (multiple answers)

lecturers (76%) fellow students and study groups (57%) tutors (21%) student administration (14%) librarian (7%) academic skills adviser (7%) and spouse (7%).

<sup>&</sup>lt;sup>2</sup> Fourteen (61%) were able to be contacted and agreed to an interview. More than half (eight) of students interviewed were studying internally, either full or part time. The remaining six were doing external or mixed mode study. Of the external or mixed-mode students, all had studied internally at some point, either at ECU or elsewhere.

For external ECU students, course delivery basically consists of lecture materials and reading material received via post, as well as e-mail and telephone contact with staff. In addition, the ECU website is accessible via Internet. Of the six external students interviewed, three found the current course delivery style satisfactory. Others had suggestions for improvement which included: the need for more Web tutorials, the desire for space to be made available in home communities for interaction with other students, the need to be able to contact lecturers and receive library and research material on time, and the suggestion of a 1800 free call number to ease communication with the university's Bunbury and Perth campuses.

## c. Non-continuing Students

The success of regional and rural students in completing their degree programs is a concern. While 23 ECU students from the Warren-Blackwood region were currently enrolled, 47 additional ECU students from this region had withdrawn, deferred or were currently not taking units in late 2000. Seventeen of these had withdrawn, 20 had deferred studies, and 10 were inactive (no current units). The fact that the region has over twice as many inactive students as active, may point to some of the difficulties of studying as a long-distance student.

In a third of cases, students identified 'distance', 'travel' and travel-related time constraints as key reasons why they discontinued their coursework.<sup>3</sup> Course content and delivery were other key factors. Over three quarters of sampled withdrawn students currently work, mostly full-time, which presents additional challenges for study. A third are seeking work, or additional work beyond what they currently have. Most were interested in resuming coursework at ECU. Their main obstacles to study would be travel, specifically the cost and availability of transport, as well as lack of time and the need for time management. Other obstacles to resuming study were the cost of university study in general, availability of childcare, family and work commitments, and access to a computer.

## View from the high schools

The availability of training is a key regional development issue. Yet in many rural and regional areas, the problems involved with accessing training in region often begin, not at university level, but much earlier. In the Warren-Blackwood region, access difficulties begin at Year 11 for most students – and impact some students even earlier. Most towns in the Warren-Blackwood region have District High Schools which offer courses through Year 10; local student numbers are insufficient to offer Years 11 and 12 courses. The town of Walpole is an exception, where students can study locally only through Year 7.

The only public Senior High School in the Warren-Blackwood Region offering courses through Year 12 is Manjimup Senior High School. For other towns in the region, however, Manjimup represents a difficult commute. From Northcliffe, for instance, some students attend Manjimup High, but it is a two-hour round trip. Long hours are spent in the bus, and displacement comes from not being able to stay on in Manjimup for sport or social interaction. There is a small private Catholic college, Kearnan College, which goes through Year 12, but it is located in Manjimup as well.

Thus, it became clear during the study that a great many Year 12 students no longer live in the region. Because Manjimup represents a long commute for much of the region, many students who wish to go on to Years 11 and 12 move outside the region to do so. They attend schools in Bunbury, Albany, Denmark, Narrogin, or Perth or elsewhere, often as boarders. The desire to be nearer to educational opportunities is a force pressuring whole families to move out of the region. "So much hinges on education," one resident commented. Another pointed out a common trend:

A lot of kids get to Year 10, and their family moves to Bunbury... it gives them those two years to settle into Bunbury, so then they can go to uni.... Most of (the people) are born and bred here, and it's really hard decision for them to make...but they realise, they've got to get the qualifications.

At the time of the study, only about 150 Year 12 students were identified who lived and studied in the Warren-Blackwood region.

<sup>3</sup> A random sample of inactive students was surveyed via phone to identify factors involved in their decision to withdraw, defer, or not take courses this term. A 20% sample of eleven students was contacted (eliminating students who had moved away or were otherwise unable to be contacted). Nine of these students agreed to an interview.

Improved access to university services may benefit students in the Warren-Blackwood region, yet by the time students reach university level, many have already moved away and are unlikely to return. Those students who remain in the region for Years 11 and 12 may benefit from enhanced university access – but not necessarily. Some are not university bound, and others are anxious to leave their 'boring' small towns and attend university at a large metropolitan campus. Even students who would prefer to stay in their home towns to study are often discouraged by the lack of facilities (e.g., labs) and limited range of courses at regional campuses. While nearly three-quarters (40) of the surveyed Manjimup Senior High School Year 12 students are considering studying at university, nearly all planned to move away from home to do so.

Forty-three percent (17) of Manjimup High School students surveyed would, however, consider studying from home if it were feasible to do so, primarily because this would be less expensive and more convenient, with lower cost of living than in Perth. Yet there is still a concern as to what facilities would be offered, e.g., for nursing students. When training is not available, individuals who seek it are forced to leave. Thus, there is often a sizeable exodus of the community's youth. "Success in small communities represents going away," often to Perth, and the regions' resources flow into the city.

One student interviewed during a community visit in Maniimup shed light on the sorts of decisions high school students in the region face. John' would like to study history (which is not offered at the university campus in Bunbury), but he is putting his plans on hold. He was asked: If you live in Maniimup and you want to go to uni, what do you do? He replied: "You go to Perth!" The problem for John is: "I hate Perth" — he doesn't want to move there, so he is putting off his studies.

John doesn't drive, and in any case the university campus in Bunbury doesn't offer the degree course he wants. For him, studying via distance education would be difficult, primarily because of 'motivation'. Having university services available locally would be positive, but they would have to be in his chosen field, and the motivation issue would have to be addressed, before he would feel confident taking on studies in a less-traditional fashion.

John's concerns are typical of those of many high school students in the region who do not feel comfortable with — or financially able to — take on a move to the Perth metropolitan area, three to five hours away. This case underlines a key problem facing regional high school students: lack of access to relevant university level education in small regional towns can have a significant impact on students' expectations and career paths. One consultant who interviewed Year 12 students at the local private school, Keaman College, noted:

What came across very clearly was the lack of tertiary education in Manjimup.... For those that weren't going on, it was mostly because they would have to leave home, and they weren't ready to do that.

A twenty-year-old spokesperson for a group of young people that recently returned to the region from Perth, stated that when students from the region move on to the city, they miss their family support. The need to leave families and communities for educational opportunities is an issue for high school students in the region, and one which does not have easy solutions. Certainly, the availability of university-level education is only one ingredient in a more complex educational landscape.

#### View from the community

The pattern of youth exiting the region post-Year-10, and the numbers of current university and TAFE students over age twenty-five, suggest that demand for university-level courses in the region may be strongest amongst older students. Interviews in the communities bore out the impression that local professionals, women re-entering the work force, farmers and others seeking to expand their skills and employability were key groups potentially interested in tertiary study.

For educators, mature-age students present certain challenges. Some have been out of educational institutions for many years and must learn, or relearn, basic study skills and discipline. Some are very intelligent yet lack baseline academic skills; as one former TAFE teacher commented, the mature age students she worked with "lacked

<sup>4</sup> Ninety-five surveys were hand-distributed to Year 12 students at Manjimup Senior High School, of which fifty-four (57%) were returned. Smaller numbers of students were also surveyed at Kearnan College (local private school) and Busselton Senior High School (where a few students from the region attend), where survey results were similar.

confidence... They were bright women...(who) had the ability to be at uni.... But the quality of their presentation was like lower primary-school level." At the same time, mature-age students bring life experiences and enthusiasm for study that younger students often lack.

Community visits in the region gave the opportunity to interview a few students who are pursuing university studies with universities other than ECU, either externally or on-line, or who had previously completed a university degree while living in the region. The experiences of these students and former students shed additional light on the dynamics of long-distance university study in the Warren-Blackwood region:

'Nancy' is a forty-three-year-old woman studying herbal medicine externally with a university in Queensland. As part of her course, she must commute occasionally to Perth for three days of lectures. The costs of travel, lodging and STD phone calls are obstacles, as well as the need to complete clinical hours as part of her degree requirements.

'Andrea' is a young student studying Criminal Sociology via distance education with a university in New South Wales. She started her degree in residence there, then continued externally when she moved. Corresponding with New South Wales has proven a challenge for this student: "They send the books to me, but it's a joke, because you can only keep them for two weeks, and mail to rural WA takes a week to arrive." She has to send assignments by regular mail, "so you have to send everything a week ahead" – particularly problematic when she is waiting for books to arrive.

'Mary' is a mature-aged woman taking an online course in computing via UWA – the actual course is from the United States. There are bulletin boards so there is interaction and feedback, also "you can work at your own pace." This student has found availability of online courses from Western Australian universities lacking. She contacted Curtin about a course in e-commerce, "but they said I couldn't do it externally. I thought that was really odd....because e-commerce is about using the Internet! They said to talk to some of the universities interstate if I wanted to do (the course) externally."

"Thomas' is a 37-year-old man who is studying metallurgy at Murdoch University externally, one unit at a time, while working full time as a mine plant superintendent. He began his degree part-time while living in Perth, and is now in his final year after ten years of study. He emphasises: "It takes a long time."

Janet' did a B.Ed and two post-graduate education degrees externally with ECU. She began the B.Ed via an "off-campus course" with local lecturers in the 1970s; this course was cancelled midway through due to lack of funding. Janet prefers distance education, because it is not necessary to listen to lectures, and she can work at her own pace. She now holds a professional job in the education field and runs her own business.

'Oscar' is a mine worker who recently completed a degree in environmental management as an external Murdoch student while working full time. At one stage he had attempted to commute to Perth for lectures but found that "too difficult." His workplace supported him in his studies.

Leslie' and 'Vicky' both did their degrees as mothers of young children. Leslie moved to the region partway through her degree in primary teaching, and commuted to ECU Bunbury for the third year. She was not offered an external studies option and found commuting expensive and difficult, although she was able to schedule her full-time courses so she could make one trip to Bunbury per week. Vicky did external studies in history at Murdoch part time, doing one unit per term; her degree took her ten years to complete. She had previously lived in Perth and switched from internal to external study when she moved to the Warren-Blackwood region. Completing the degree opened up an opportunity for her as a TAFE lecturer.

'Sue' recently finished a business/accounting degree at ECU as an external student. She had begun her degree in 1990, later moved to Perth to study, and then moved to the Warren-Blackwood region; she attempted to commute but ended up doing her final year as an external student. She is now working in her small town as a Landcare coordinator.

Most of these students completed their degree via a mixture of internal and external study, often abandoning attempts to commute due to difficulty and costs. Challenges presented by moving house, raising children and the sheer time involved in completing a degree (ten years in some cases) are common features of these stories.

#### Key needs and potential solutions

Long-distance students in regional and rural areas face particular issues. The study identified the following key issues for university students in the Warren-Blackwood region:

- isolation and lack of peer interaction/ peer support;
- limited access to academic resources (particularly texts and research materials); and the need for "enormous levels of motivation".

Particularly, students who commute long-distance to campus face:

- expense (transportation, sometimes lodging, child care, and/or time off from work);
- transport difficulties; and
- · time crunch as they try to juggle family, commuting time, study, and often work as well.

While students who study externally face:

- · difficulty communicating with lecturers and tutors;
- a strong need for independent study skills;
- long time-lags between start of courses and completion; and sometimes,
- difficulty in completing degrees when degree programs are changed or courses are not offered externally.

Long-distance students frequently used "interaction" and "contact" to describe the on-campus experience and "isolation" to describe the off-campus experience. Students observed: "The disadvantages with external studies are that you miss out on the contact with other students." "Anyone that was studying externally, we found that we shared that common sense of isolation, and the stress that you go through when you've got assignments due and you try to juggle family, work, assignments.... By the time I'd finished, I'd become an independent studier." "Just the fact that you're studying can be quite isolating. Your friends are not studying, your partner isn't studying." Realities of travel and time constraints mean that many commuting students also face isolation, though to a lesser extent that their colleagues who study externally.

On-site degree courses in the region's small communities are generally not feasible due to low student numbers. Mixed distance and face-to-face learning in small communities, however, might offer an alternative to existing models of internal and external study. Designing such programs requires an in-depth understanding of what services regional and rural students need, and what obstacles they face. Comments made by a wide range of current and former long-distance students from the Warren-Blackwood region suggest that there are particular obstacles which, if overcome, could heighten the likelihood of student success, while making education more feasible and appealing for other students in the region. These are:

- · access to other students: study groups, discussion groups, student-to-student socialising;
- access to lecturers, both face-to-face and via telephone;
- access to other people relevant to the learning process, such as a local mentor,
- "Involved", informed and proactive tutors;
- · access to academic resources, particularly texts and books/articles for research projects;
- access to a quiet place to study, and/or child care;
- reduced need to travel;
- access to academic information university courses, requirements, etc.;
- access to general academic support, to enhance time management ability, provide support and reduce isolation;
   and
- different ways of presenting material and assessing it, appropriate to long-distance students.

The heart of successful service lies less in technology than in methodology – understanding the culture of learning, and responding in creative ways. Technology alone is not enough – students who had experienced courses via videoconference characterised them as "dreadful" or "ineffective", for the instructors were basically talking heads.

Yet paper correspondence, still the most prevalent technology of university distance education in the region, can be both dry and isolating. One local professional commented: "I did two postgraduate qualifications via corresponence—it was awful.... There's no substitution for having face-to-face contact with someone to whom you can relate, personally and professionally."

That "face-to-face" contact is a key aspect of the culture of learning, as expressed by current and former students in the Warren-Blackwood region. The contact need not be with lecturers – other students can play this role, even students from somewhat different fields. The key need is to talk ideas – concepts for papers, group discussion, etc. – and experiences – what it feels like to be a student, sharing stresses and enthusiasms. A list of names of other students in the same field, as the university currently provides, is useful but not enough. A chance to actually meet other students – whether during a beginning-of-term orientation, monthly gatherings, or in an informal meeting area for local students – would reduce the stresses associated with distance study. Once face-to-face contact has been established, ongoing contact via e-mail, telephone and in-person meetings would be more likely.

The lecturer is a key ingredient in the learning culture of students interviewed, though much of the role he or she plays can also be taken by an effective tutor who knows the subject area well. When material is unclear and when students don't understand a point, being unable to contact a knowledgeable person and receive an effective explanation, in a timely manner, is vital to the learning process. The question of whether lecturers need to actually present the course material depends on the subject (for art, it is vital; for history, it is not) as well as the particular learning style of the student (some students prefer to read, other students prefer to watch a lecture).

In general, videos of lectures appeal, but would need to be used when the visual aspect of the lecture is engaging – not just a talking head. Similar considerations would apply for videoconferencing – including a lecturer who knows how to deliver to a camera. Direct visits to communities from lecturers are neither economical or necessary in most cases – though local mentors would be useful in providing subject-specific assistance and someone face to face "with whom you can relate." Such mentors could potentially be recruited onto a local consultant database and compensated on an as-needed basis. Finally, local academic advisers or periodic visits from tutors could play a key motivational and facilitating role.

Tailoring courses to the needs of regional and rural students is no small challenge — it requires an in-depth assessment of curriculum and delivery mechanisms in the light of local resources, obstacles and the kinds of learning-culture issues mentioned above. At the same time, the variety of student needs must be met: computer-literate, motivated students offer certain options for effective course delivery, while underprepared but motivated students may need bridging courses to build confidence and boost computer literacy, research and writing skills to appropriate levels. Existing resources offered by local libraries and telecentres can be built upon and obstacles alleviated. In the end, creativity and flexibility in course design and delivery will be key to responding to the needs of isolated regional students in effective yet low-cost ways. The challenges and the opportunities are enormous.

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