

# **PERSPECTIVES ON THE INTERNATIONAL SALE OF TERTIARY EDUCATION SERVICES**

**ISSUES PAPER NO. 5**

**Edited by  
JAMES E. ALVEY**



**CENTRE FOR PUBLIC POLICY EVALUATION**

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## PREFACE

This volume contains papers presented at a forum held on 15 October 1998 at Massey University in Palmerston North plus a further comment by James Alvey and a combined paper by Alvey, Birks, and Buurman which grew out of this work. The last mentioned was presented at the Annual Educators Conference of the New Zealand Strategic Management Society. The October 1998 forum was an attempt to view the issues surrounding the international sale of tertiary education from a range of practical and theoretical perspectives. It was clear that tertiary education is currently a very volatile area. There is a need both for analytical input to policymaking and for academics to be better informed and responsive to the changing circumstances.

Current academic thinking tends to view individual courses as separate products, to be largely designed and run by individual staff members. This is in part their strength, through the particular perspective and personal contribution that an academic can offer. It is also a weakness, however, as it means that degrees as a whole may be harder to structure and the "product" is less responsive to the "market." In particular, a university actively trying to attract students requires teamwork between those marketing the university and those providing the courses. In the first instance, students are attracted by the reputation of the institution and by degree programmes far more than by individual papers.

Traditionally universities have had a catchment population in their own locality and have also drawn students from further afield. Funding issues have influenced students' willingness to move away from their home towns to study, and for some, extramural study has been the preferred option. Students in some overseas countries have been constrained by the limited size of their own tertiary education sector. This has contributed to the development of an international market in tertiary education. This market is changing rapidly due to world economic circumstances, policies put in place by individual countries affecting access, funding, and so on, and the development of new delivery modes resulting from technological advances. Past assumptions about markets and possible student numbers attracted to a particular institution may no longer apply.

Methods of teaching are likely to change. This is where flexibility and appropriate adoption of new technologies can be significant. It is not a straightforward issue. The technologies have to contribute to the teaching, rather than being applied for their own sake. Academic staff also have to be comfortable with the new technologies that they use. It is important that technologies be introduced in a way which does not create barriers between academic staff and students due to difficulty of use, the need for intrusive specialist input, or simply resistance by staff. Wise use of technology can give a competitive edge to forward-thinking institutions and academics.

The points made above relate to practical and on-the-ground experience. Theoretical and research input is also required. Two key areas in urgent need of attention are those of pricing and incentive structures.

Pricing issues are central to the success of any venture. These are complicated in tertiary education due to alternative delivery modes, combined costs arising from joint production, consideration of overheads, differences between average and marginal costs, government funding structures, and the ability and willingness of the market to pay. Market failure and the existence of externalities are also important. Circumstances and the policy environment vary from country to country, so the economic issues involved in pricing are complex. Nevertheless, institutions have to determine what prices should prevail.

The success of an institution to adapt to the changing circumstances will depend on the staff involved. Their contribution will depend on the incentives, infrastructure, and support networks. Significant in this are the awareness of the need for change, understanding of the opportunities available, and suitable financial and other rewards for those making an appropriate effort.

The participants at the forum attempted to address some of these issues. It is hoped that these papers serve to stimulate debate and increase awareness on these issues which are fundamental to the future of tertiary education in New Zealand and elsewhere.

Finally, I wish to thank Peter J. Mellalieu and the New Zealand Strategic Management Society Inc for allowing the printing of Chapter Seven, which is a slightly modified version of “Internationalization of Tertiary Education: Strategic Issues” by James E. Alvey, Stuart Birks, and Gary Buurman which appeared at pp. 257-66 in P. J. Mellalieu (Ed.) *Think Global! Act Global! The Role and Impact of Strategic Management in the Development of Small Enterprise and New Ventures. Proceedings of the Annual Educators Conference of the New Zealand Strategic Management Society. 7th Annual Conference, Graduate School of Business, Massey University, Palmerston North, 3-5 February, 1999, PECNZSM Volume 1, No. 1, February 1999 (ISSN 1174-8419).*

Stuart Birks  
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## **INTRODUCTION**

This collection of papers presents a range of perspectives on the international sale of tertiary education services. Its focus is on degree programmes at New Zealand universities that cater to the international market. Major issues discussed include: the scale and growth of the industry; costs and benefits of providing international education; pricing of education services; and alternative modes of delivering education services.

The book arose from a forum on the export of tertiary education services held at Massey University in late 1998. The idea of the forum was to bring together a number of people with different perspectives on the sale of education services on the international market. The forum brought together educationalists, economists, political scientists, education administrators and education marketers. Following the forum several of the papers were substantially revised.

James Alvey, Alan Duhs and Ted Duhs are economists and political scientists and Alan Duhs has had experience teaching block courses off-shore. Their chapter provides an outline of the history of international tertiary education in New Zealand. Alvey, Duhs, and Duhs discuss the growth and scale of the New Zealand tertiary education export industry and the implications of this growth. Attention is also given to some recent events which may impact on the growth of the industry.

Tom Prebble is an educationalist with a wealth of experience in practical aspects of distance education administration. His hard-nosed chapter is short but presents us with some of the key issues relevant to distance education of international students. Prebble provides a nice classification scheme of the various modes of distance education designed for the international market.

Gary Buurman is an economist with almost thirty years of experience teaching university students. Buurman's chapter presents some of the important issues relevant to international education from an economic perspective. He discusses some of the theoretical aspects of pricing of education services. Based on the notion that social benefits of education tend to go to the country in which the educated person resides, Buurman argues for full-cost fees for international students but subsidized fees for domestic students. He also discusses the range of benefits and costs that are associated with international education.

Wayne Edwards is an educationalist with extensive experience with international students. In his chapter he raises many issues related to a specific education export programme. He proposes to take an existing Masters degree programme off-shore. Edwards indicates that the programme could provide substantial income for the university and the relevant department of the university. While he does not raise the issue, it seems to me that an additional issue relates to the motivation of the individual staff member. Running a programme outside of New Zealand requires a great deal of travel time, teaching and marking. Why will individual staff members do these things year after year? In many instances personal incentive is the key to making such a

programme work. Altruism may be sufficient to initiate an expensive and time-consuming off-shore educational programme but it is unlikely to be sufficient to sustain it at a high quality level over a number of years. Without personal incentive the staff involved will be tempted to reduce the quality of service. Students will quickly notice any decline in quality and the university's reputation will be damaged; unfortunately, a good reputation once lost is hard to recover. Unless institutions are prepared to recklessly risk their reputation when they offer off-shore programmes, they will need to consider how individual staff will benefit. Will the staff member receive a share of the revenue generated? Will the staff member get compensation in terms of a reduced workload in other areas?

Bruce Graham is the head administrator of an international student office. He brings to his chapter first hand experience as a university marketer and a service-provider to international students once they have arrived. Graham shows us the role of the international student office and why such offices are needed.

I have included two other chapters which take the issues discussed at the forum a little further. The first is a note on mercantilism, which responds to a criticism of an earlier version of Chapter One, by Alvey, Duhs, and Duhs. The second is a joint paper by Alvey, Birks, and Buurman which takes some of the issues outlined in the forum chapters, especially incentives, a little further.

The collection of papers is incomplete. Other possible areas to consider include the internal organisation of institutions, collaboration between institutions, and activities elsewhere. Further, work can also be undertaken on pricing and marketing issues. Some of these issues are explored in the Alvey, Birks, and Buurman paper. Overall, it is clear that much more information needs to be placed in the public domain on this new industry.

Until now, little research has been undertaken on the tertiary education export industry in New Zealand. By contrast, in Australia there has been a lot of research undertaken on education exports. It is to be hoped that the present collection is an indication of a growing interest in the New Zealand industry and that it will promote further research into the topics discussed.

# Chapter One

## NEW ZEALAND EXPORTS OF TERTIARY EDUCATION SERVICES <sup>1</sup>

by  
**James E. Alvey, E.J. Duhs and L.A. Duhs**

### 1. INTRODUCTION

Until the end of the 1980s, New Zealand's involvement in international education services was linked to foreign policy and its foreign aid programme (see NZMDB 1987, 11). New Zealand's sponsorship of international students began with the Colombo Plan in 1950. By 1986 there were 2551 international students enrolled in New Zealand universities, and, of these, 589 were government- and Commonwealth-funded students. The majority were private international students who paid either no fees or paid the same subsidized fees as local students (Smith and Parata 1996, 6). The right to charge full-cost fees was restricted to a few approved institutions in the private sector (NZMDB 1987, 11).

New Zealand watched the change in Australia in 1987 from an "aid" to a "trade" approach to international students (see Duhs and Duhs 1997, 160). The New Zealand Market Development Board (NZMDB) stated in 1987 that, like Australia, New Zealand was already a late entrant to the "growing international market for educational services" (NZMDB 1987, 3). Nevertheless, it recommended policy changes to lift existing constraints on entering the market and argued that New Zealand "should aim to make educational services a major source of international exchange" (NZMDB 1987, 7).

The report, along with the developments in Australia, was clearly important in bringing about a change in government policy. "The government's decisions on overseas students' policy were announced by way of a press release on 27 December 1988" (NZVCC 1989, 15). The effect was stated by the New Zealand Vice-Chancellor's Committee (NZVCC) as follows:

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<sup>1</sup> The authors would like to thank the Massey University College of Business for providing a Business Research Fund Grant to purchase data from the Department of Education for this research; and the Department of Applied and International Economics at Massey University for funding for research assistance. Useful comments were provided by Dr. Michael Carter, Department of Economics, University of Canterbury. Data and other information was provided by Mr Stuart Rose and Mr. John Sargent of the N. Z. Education International Ltd.; Mr H. Ward of Finance Section in Massey University; Mr Bruce Graham and Ms Dianne Reilly of the International Students' Office, Massey University; Mr John Kennedy, the Finance Registrar at the University of Canterbury; Mr Wayne Angus of the University of Otago. Earlier versions of this paper were presented at the New Zealand International Education Conference (Wellington, August, 1998) and the New Zealand Association of Economists Conference (Wellington, September, 1998) and the Forum on the International Sale of Tertiary Education Services (Palmerston North, October 1998). Some of the material in this paper will appear in Alvey, Duhs, and Duhs forthcoming.



The government's decisions ... included a new fee system for private overseas students entering a New Zealand university for the first time in 1989. The tuition fee for such students will rise from \$516 to a full-cost fee in the vicinity of \$8,000 for arts, commerce, humanities and law students, and \$14,000 for students in applied subjects such as agriculture, computer science, engineering and science. Full-fee-paying overseas students are not to be admitted to any university for which there is a qualified New Zealand applicant (NZVCC 1989, 15).

The expression of this policy change in legislative form took until December 1989 when the Education Amendment Act was passed. The 1989 changes affected the whole of the government tertiary education sector: universities, polytechnics, and colleges of education. Section 20, sub-section 4 of the Act, states that international students at tertiary institutions have to pay a fee which is not less than the sum of :

- (i)...the cost to the [institution's] council ... of providing tuition in the subject, course, or programme for 1 student; and
- (ii) An amount that is ... [an] appropriate reflection of the use made by 1 student receiving tuition in the subject, course, or programme of the council's capital facilities.<sup>2</sup>

It is not clear from this wording whether international students will be charged average or marginal cost. Also, it is not clear whether the charge is for total operating costs or merely that portion of operating cost attributable to teaching. Sub-section 10 of the same section of the Act states that:

no foreign student who is not an exempt student shall be enrolled at a tertiary institution if the student's enrolment has the effect that a domestic or exempt student who is entitled to enrol there and has applied for enrolment is not able to be enrolled.<sup>3</sup>

In the next sub-section of the Act, this principle is extended to include the enrolment in "subject, course, or programme." In other words, international students are to be enrolled where they do not displace local students<sup>4</sup> and where they are charged the full-cost of providing the educational services.

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<sup>2</sup> In the same Act, amendments of a similar nature were made to all the university acts. See Sections 27, 31, 35, 39, 43, 47, and 52.

<sup>3</sup> In the same Act, amendments of a similar nature were made to all the university acts. See Sections 25, 29, 33, 37, 41, 45, and 50.

<sup>4</sup> A loophole for tertiary institutions seems to exist in Section 20, sub-section 13, of the Education Amendment Act, where it allows an international student to enrol even where a domestic student may not be able to enrol, if there is a vacant place – (a) That the council established for international students; and (b) Whose continued availability is dependent on the fees payable by international students enrolled in it.

As we said above, the 1989 Education Amendment Act specified that fees for international students were to be set by determining the cost of providing tuition; but it left several ambiguities regarding the method of determining cost. The Ministry of Education, at the time, interpreted "cost" as the total cost (direct and indirect) of providing tuition for the students in the particular programme in which they were enrolled. It is true, however, that there was no audit by the Ministry of compliance with these sections, as the Audit Office of the Auditor-General has the responsibility for auditing legislative compliance. Section 228 of the 1990 Education Amendment Act repeated the same clauses. The situation changed, however, in 1991.

Following the introduction of the new fees there were many complaints. In particular, there were complaints by institutions that postgraduate fees were too high and well above "market" rates. This led to a review of fees. The result of the inquiry was that parliament changed the legislation to accommodate some of these concerns. The amendment (No 4) to the Education Amendment Act in 1991, changed the wording in Section 25 to allow for the charging of fees on the basis of marginal costs, if the foreign student was enrolled in a course set up for domestic students. The amendment says that the international student shall pay the sum of two amounts. The first amount varies depending on whether the course is only for international students or not. It is either:

- (i) The cost to the institution (including the institution's *marginal administrative and other general costs*, and the appropriate proportion of any initial or start-up costs of the course) of providing tuition in the course for 1 student, in the case of a course in which no domestic student is enrolled; [or]
- (ii) The *marginal cost to the institution* (including the institution's *marginal administrative and other general costs*, and any *marginal initial or start-up costs* of the course) of providing tuition in the course for 1 student in addition to the domestic students receiving tuition in the course, in every other case (emphasis added).

In addition to (i) or (ii), there is a second amount charged to international students. This amount is a marginal capital cost charge which is common to all courses, whether they are provided for international students exclusively or for both domestic and international students. The second amount is:

An amount fixed by the Council that is not less than an amount that in the Council's opinion is an appropriate reflection of the use by 1 student receiving tuition in the course of the *capital facilities (if any) whose provision at the institution is necessary by virtue only of the institution's provision of the tuition to foreign students in addition to domestic students* (emphasis added).

In conclusion, it seems that the 1991 amendment requires marginal cost fees for the majority of international students: those who enter into courses that have both domestic and international students. A higher charge applies to international students who undertake courses set up entirely for international students. So the outcome of the change was generally a shift from average to marginal pricing.

Let us turn from the legal requirement to the fees actually charged. In 1998, the fees charged for degree courses at the seven New Zealand universities ranged from \$10,000 to \$45,000.<sup>5</sup> The highest fee, of \$45,000 was for Dentistry in years 2-5 at the University of Otago. Outside of Otago, the top fees within each university were significantly lower; the highest fee outside of Otago was \$33,000 at the University of Canterbury. Most universities had similar charges for an undergraduate Arts degree. In some institutions, like Massey University, there were many different fees; at others, only a few categories of fees applied.

The next step is to investigate whether the fees actually charged reflect the legal requirement. We asked the Audit Office whether it specifically checks the pricing structure of tertiary institutions to ensure that marginal costs are charged. A vague response was given<sup>6</sup> which made reference to the fact that “it is usual to focus” on the audit of domestic student fees. There was also a disturbing statement that “there have been differences of opinion in the interpretation of s.228.” Presumably this means differences of opinion have occurred over whether average or marginal costs apply. But perhaps it could mean that the disputes were over whether price is just what the market will bear. Economists, like Throsby (1986), have investigated the cost structure of tertiary education institutions in Australia. As far as the authors are aware, no similar studies have been undertaken in New Zealand. Clearly, more attention needs to be given to the actual pricing of New Zealand tertiary education services.

With the shift from an “aid” to a “trade” approach, the New Zealand exports of tertiary education services became a growth industry.

## **2. GROWTH OF TERTIARY EDUCATION EXPORTS**

The move to full-cost fees in Australia and New Zealand proved to be very successful. At a time when many of the traditional exports of these countries have been doing poorly, and both countries have been running current account deficits for many years, exports of tertiary education services have been very successful.

What happened in Australia? Full-cost fees were charged for international students studying in Australia from the beginning of 1987. Prior to 1987 foreign students were subsidized and subject to a quota restriction. Even with the rise in fees, the lifting of many of the quota restrictions led to a dramatic growth of international student enrolments. By 1997 there were 142,600 international students studying in Australia, including 64,040 at universities (Duhs, Duhs, and Alvey 1998, 1). The result was that for Australia as a whole fees income from international students in tertiary education alone rose from almost zero in 1986 to \$827 million in 1997. When the fees revenue is combined with associated expenditures on living expenses by international students, tertiary education institutions, and universities in particular, were thus placed in a

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<sup>5</sup> All fees are from information provided by NZEIL.

<sup>6</sup> Personal correspondence between the Office of the Controller and Auditor-General and Dr. J. Alvey.

position of export prominence. The total education export industry has been calculated to inject \$3.3 billion into the Australian economy (AIEF 1998, 17, 106-7).

What happened in New Zealand? We would expect to find a similar pattern to the Australian experience but on a smaller scale. The number of fee-paying international students in tertiary education in New Zealand increased from just under 2,000 to about 6,200 in the period 1992 to 1997, as shown in Table 1(a). Growth in international student enrolments in each of the government tertiary institutions in the same period is shown in Tables 1(b), 1(c), and 1(d).

The growth in international student numbers resulted from several factors. On the supply side, there were at least two factors: deregulation of education and falling government funding. First, before 1989 there was significant unmet demand from students in the Asian region: quotas on international student enrolments applied in most areas. The existing demand from international students was mentioned in the New Zealand Market Development Board's report.<sup>7</sup> The second cause of increased international enrolments was the change in the goals of tertiary institutions themselves. In the past the New Zealand tertiary institutions took a certain number of international students, where space permitted. International students were seen as part of *noblesse oblige*, but this had limits – too much charity would bankrupt the institution; international students were marginal in number, and irrelevant to revenue and growth objectives of universities. In recent times, many institutions have included as one of their corporate objectives, stated in their annual reports, the increase of international student enrolments. For example, at least since 1992, the University of Otago, under the "resources" heading, has the objective "To increase the number of full-cost fee paying overseas students" (*Annual Report 1992* p. 11; *Annual Report 1993* p. 16). Next to this is the result for the year under the heading "performance." Some institutions specify what percentage of the student population they wish to have as international students. Others have increased the percentage of international students without making this an explicit goal. In 1996 international students comprised 21% of the total student body in Lincoln University (*Annual Report 1996*, p.5). Particularly because of perceived falling government grants to universities, revenue is clearly an important factor in promoting the enrolment of such students.<sup>8</sup> Of course, these factors also applied in the growth of the industry in Australia.

There were also a number of demand side factors: rising income levels in source countries; the universality of English in commerce; travel costs; and the cost of substitutes. The largest source of international students throughout the world is Asia. Indeed, Rose (1998) states that 62% of international tertiary students who go to study in the English medium are sourced from Asia. In many of these countries economic

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<sup>7</sup> In particular, it argued that there were "significant opportunities for the earning of foreign exchange from English language training, agricultural and horticultural education, courses in other technical subjects, and university courses in subjects where there is spare capacity" (NZMDB 1987, 3).

<sup>8</sup> Many tertiary institutions would see the need for such revenue as replacement for what is claimed to be falling revenue from the New Zealand government.

booms were experienced in the 1980s and early 1990s. Even in the less prosperous Asian countries there was a class that was able to afford to send their children overseas for tertiary education. Second, New Zealand had the advantage that the language of instruction is primarily English, which has become the *lingua franca* of the modern era. Third, the cost of travel from South-East Asia to New Zealand is small, relative to the cost of travel to the USA or the UK. This is relevant for the student making return visits during vacations, and for parents and other family members who wish to visit the student during the period of study abroad. Fourth, the fees charged by New Zealand tertiary institutions were frequently lower than those available in the USA and the UK. Despite the price advantage, an education in the prestigious universities of the USA and the UK was often considered worth a considerable price premium. Thus New Zealand came to be considered as a destination for the middle class rather than the very rich. We will return to this later in the paper when we discuss the recent Asian economic crisis in Section 4.

This section of the paper, showing the growth and character of tertiary education exports, was to follow the pattern set out in the Australian study by Duhs and Duhs (1997). Unfortunately, several tables could not be completed. Information on fees revenue is incomplete (see Table 2).

Nevertheless, we do know that revenue from fee-paying international students has grown rapidly. New Zealand's international education market is estimated to have earned \$55 million in foreign exchange in 1990 (*New Zealand Export Yearbook* 1996, 57). It was estimated to have earned \$300 million per year in 1997 (*New Zealand Export Yearbook* 1998, 61). The New Zealand Minister for Foreign Affairs and Trade, the Right Honourable Donald McKinnon, recently stated that "more than 20,000 Asians are currently studying in N.Z., generating annual foreign exchange earnings of nearly \$300 million" (McKinnon 1997). More recently, the New Zealand Education International Ltd. (NZEIL), the company charged (until January 1999) with the generic promotion of New Zealand educational services on international markets, has suggested that the total foreign exchange impact of education exports was \$540 million in 1997 (see Table 3 below). These estimates include the foreign exchange earnings due to the significant enrolments of international students in high schools, which are outside of the scope of this study. Nevertheless, these figures help to establish some parameters for the present study.

Except for the 1998 NZEIL estimate, none of the estimates of the size of the industry, mentioned above, were supported by any details; no indication was given as to how the figures were derived. As far as the authors are aware, there have been only two attempts to document the basis of calculations of the foreign exchange impact of education exports. The first was provided by the authors themselves (see Alvey, Duhs, and Duhs forthcoming). The second was provided by NZEIL.

In 1997 we estimated that *tertiary* education exports including ELICOS was \$356 million in 1997. In 1998 we completed a new set of calculations. We estimated that *tertiary* education exports were worth about \$400 million in 1997.

In the present chapter we will show again how we arrived at this estimate. All of the seven New Zealand universities were contacted on several occasions to try to ascertain the fees revenue from international students. Only three universities (Massey, Canterbury, and Otago) replied (see Table 2). Consequently, no grand total of fees revenue was able to be determined from information provided by these institutions. Nevertheless, it is clear that New Zealand as a whole has not entered the international education market in the same aggressive manner that was adopted in Australia. Second, no New Zealand institution has entered the market like the Royal Melbourne Institute of Technology or Monash University, each of which had about 5,800 international students enrolled in 1997 (Duhs, Duhs, and Alvey 1998, 1).

With those preliminary remarks as background, we now turn to the task of estimating the size of the industry, in terms of its foreign exchange impact. Assuming that there are 6,200 full-fee-paying international tertiary students who are not receiving New Zealand government scholarships, and assuming that the average fee is \$12,000, the total fee revenue is \$74.4 million per year. After speaking to a number of people in the industry it seems that this number is probably too low. Based on Table 3, supplied by NZEIL, the fees revenue is \$85m. This works out to an average fee of about \$13,700. We will use the NZEIL figure in the remainder of the chapter.

In addition to paying tuition fees, international students living in New Zealand also generate other expenditures on accommodation, living expenses, entertainment, and travel. A supplementary spending multiplier therefore needs to be estimated to gauge the full foreign exchange impact of the industry. In the 1996 University of Waikato *Annual Report* (p.18), it was stated that enrolments from full-fee-paying international students “contributed an estimated \$5.5 million in living expenses to the Hamilton community,” or the same amount as the fees revenue from these students. This supplementary spending multiplier, of 1.0, is very conservative, as it does not appear to take account of travel, and other expenditures.

NZEIL applied a supplementary spending multiplier of 1.0 until 1998.<sup>9</sup> This figure was derived from a small survey of international students in 1993. In 1998 a much more sophisticated approach was adopted by NZEIL; they applied a multiplier which varied depending on the category of student. The “NZEIL multiplier” which appears in Table 7 varies from 0.2 to 2.67. The NZEIL multiplier does not provide an estimate of the “supplementary spending” by international students. Rather it provides a total of the beneficial foreign exchange effects. In the Duhs and Duhs (1997) approach, the supplementary spending has to be added to the fees revenue to obtain the total foreign exchange effect. To convert the “NZEIL multiplier” to a “supplementary spending” multiplier the rule of thumb is to deduct one. So the NZEIL supplementary spending multiplier varies between -0.8 and 1.67. The bulk of the ordinary international tertiary students have an “NZEIL multiplier” of 2.5 or a “supplementary spending” multiplier of 1.5.

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<sup>9</sup> Facsimile from Mr John Sargent of NZEIL to Dr. J. Alvey dated 29 January 1998.

Based on their own survey of international students in Australia, Duhs and Duhs (1997) use a “supplementary spending” multiplier of 2.279. At the NZEIL 1998 Conference, a keynote speaker suggested that the supplementary expenditure multiplier was actually a little lower in Australia than what Duhs and Duhs use. The source for this view was *A Study of the ELICOS Industry in Australia, 1996*. This study of the Australian English Language Intensive Courses of Study for international students (ELICOS) sector indicated that the supplementary expenditure multiplier varied from 2.02 in 1992 to 1.92 in both 1994 and 1996 (ELICOS 1997, 232). This study was expensive and thorough. It is given an authoritative status in discussions with the federal government. On the basis of this study we have provisionally concluded that the Duhs and Duhs multiplier may be a little high. Let us use a “supplementary spending” multiplier of 2.0. If that latter multiplier is applied to the \$85 million provided by NZEIL, the foreign exchange effect of international tertiary students in New Zealand is \$255 million per year.

The present authors have not made an independent study of the ELICOS sector in New Zealand. Nevertheless, it is clear that ELICOS is a major revenue earner for tertiary institutions. Consequently, this sector must be included in any calculation of tertiary education exports. NZEIL suggested that out of a total of \$540 million in foreign exchange which is attributable to education services, second language schools may be generating about \$143.5 million in foreign exchange.<sup>10</sup> More work needs to be done to establish the number of students involved, where they come from, how much fees revenue they generate, and what additional expenditures they incur while in New Zealand.

If we assume that the NZEIL estimate for ELICOS -- of \$144 million -- is reasonable, and add to that the \$255 million that we estimated for regular degree-seeking international tertiary students, we obtain a total of \$399 million per year for tertiary education exports. In terms of commodity exports this would put tertiary education at fifteenth place (*New Zealand Official Yearbook 1998*, 512).<sup>11</sup> If all education services (including education services provided to international high school and primary school students) were included, the ranking would be even higher. Statistics New Zealand does not provide a comparable list for contributions to the balance of payments of service providers. There is no list for exports of services in the overseas trade statistics. On the other hand, it has been estimated by the New Zealand Tourist Board’s International Visitor Survey that tourism (including revenue from international airfares) amounted to \$4.8 billion in 1996 (*New Zealand Official Yearbook 1998*, 296). Some of that amount would include tertiary education exports; it would certainly include all of the ELICOS contribution. To avoid double counting, calculation of services exports in the national accounts would need to separate out tourism and education services.

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<sup>10</sup> See the NZEIL table. We used the NZEIL assumption of \$1000 per student for holiday spending to arrive at the total of \$143.5 million. The remainder, of \$125 million, was explicitly mentioned in the NZEIL table. (It was derived from a multiplier of 1.67 for 18,499 students spending an average of \$2,544 on fees.)

<sup>11</sup> The Victoria University of Wellington Vice-Chancellor, Professor Michael Irving, has stated that education was “New Zealand’s seventh biggest export industry and had the potential to be in the top five” (quoted in Williams 1999, 10).

It is expected that by the year 2005 the value of exports from the tertiary education sector will double again, although recent (1997-98) economic turmoil in South-East Asia may prevent this achievement. If this growth is sustained (and the export value of other industries remains constant), this sector would be ranked eighth in the list of *commodity* exports. Tertiary education exports will contribute almost as much to New Zealand's exports as traditional export products like wool -- which has contributed between \$1100 and \$1300 million per year to export earnings in 1994-96 (*New Zealand Official Yearbook*, various years).

Before leaving this discussion we would like to comment upon the foreign exchange calculations provided by NZEIL in Table 3. The difficulty with the NZEIL calculations occurs in the presentation of the impact of students who come under various New Zealand government foreign aid schemes. If foreign aid merely covers tuition fees, the living expenses must be paid by the international student. The NZEIL table includes several categories of international students with a "supplementary expenditure" multiplier that is below one. For these students, the supplementary spending does not cover the fees revenue forgone in foreign aid, and the total foreign exchange effect is negative. Either the students entering under foreign aid schemes should be excluded, or the effect of both aid and supplementary spending on foreign exchange should be included, in the table. The NZEIL table wants the best of both worlds: on the face of it, the table inflates the foreign exchange effect on this ground. On the other hand, the table may actually underestimate the foreign exchange effect, if the value of the multiplier is larger (as suggested by Duhs and Duhs 1997 and ELICOS 1997) than the figures that NZEIL used.

We might also note that even if substantial sums are paid in foreign aid to the student, as long as the "supplementary expenditure" multiplier is greater than one, NZ government scholarships to international students offer themselves as a form of New Zealand aid to New Zealand. In addition, education of international students also helps to familiarise young New Zealanders with the Asian environment and helps to build business awareness. This approach to aid offers the possibility of benefiting both countries.

Information on the qualifications sought by international tertiary students is provided at Table 4(a). The corresponding table for universities is provided at Table 4(b). Some information on the discipline area of international university students is provided in Table 7.

About 73 per cent of international students attending New Zealand tertiary institutions came from Asia in 1997 (see Table 5(a)). Asian students comprised about 74 per cent of international students attending New Zealand universities (see Table 5(b)). In addition, about 16 per cent of international tertiary students, and about 12 per cent of international university students, were from the Pacific Islands. In New Zealand there are only a few major sources of international students. As seen in Tables 6(a) and 6(b), in recent years Malaysia was by far the leading source of international tertiary students. The dominance of Malaysia as a source country declined somewhat in 1997.



Nevertheless, over 30 per cent of all international tertiary students and 40 per cent of all international university students came from Malaysia in 1997. On the face of it, and especially in the light of recent developments, this would seem to be an imprudent dependence on a single source. As Tysome points out “Asia’s economic problems exposed an over-reliance [by Britain, USA, and Australia] on markets in Malaysia, Singapore, Hong Kong, Thailand, [South] Korea and Indonesia” (1999, 8).

Since the introduction of full-cost fees there has been considerable growth in the number of postgraduate international students. The University of Otago enrolls the highest number and highest proportion of postgraduate international students. Table 7 provides further details. The generally higher fees that are charged for postgraduate studies also impacts on the export figures. For example, at Massey University a B.B.S. degree costs \$10,500 per year but a M.B.S. degree costs \$15,500 per year. Most B.A. degrees are \$10,500 per year but the M.A. costs \$15,500 per year.<sup>12</sup>

In this section we have seen that a new industry has been established and grown rapidly. While some data has been presented in the Appendix, much work remains to be done to improve on the estimates that we have produced.

### **3. IMPLICATIONS OF THE GROWTH OF THE INDUSTRY**

Given the growth of education exports over recent years, we would expect some significant effects to result. What are some of the implications of this growth for educational institutions?

First, there will be more stress on teaching quality and incentive systems to improve the quality of education. As a result of the growth of education exports there is a substantial number in the tertiary student population that are discerning customers who will demand high quality lecturing, prompt marking, and out of class assistance. If a good is provided free, one cannot complain much about the quality. Because of the substantial fees (\$10,000 or more) that are charged to international students, there will be much closer scrutiny of the quality of the education services provided. This means that student evaluation of teachers of international students will become more important. While some programmes have been established exclusively for international students, most are provided to both international and domestic students. The consequence is that student evaluations of teachers across the board will become more important. Incentive systems will have to be applied to improve the quality of teaching performance (Duhs and Duhs 1994a).

Second, there may be adjustments in budget allocations *to* institutions by government. While the present New Zealand government has temporarily shelved plans to adopt a voucher system of funding, it has withdrawn a significant amount from regular research funding for universities and made this into a contestable pool. The splitting of the teaching and research functions has become clearer; the old system favoured university research but the new system is based on funding teaching (and research becomes an

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<sup>12</sup> Massey Fees Schedule supplied by NZEIL.

add-on). Along the same lines are attempts to commercialise universities. In the latter case “applied research is pushed out into the consultancy world on a user pays basis – implying no necessary role for taxpayer funded institutions” (Duhs and Duhs 1994b, 500). The returns on theoretical research may well be seen as a poor investment in the short-term. On the other hand, revenue from students is substantial and, in the case of most international students, immediate. The government therefore has a considerable incentive to change the funding allocation towards the teaching function and away from the research function. Measuring the value of teaching and research was always considered to be difficult but the implicit presumption underlying funding allocations was that research was more valuable than teaching and consequently the former required greater financial support. Duhs and Duhs (1994b, 501) state that “the aggregate value of teaching is both high and unheralded and that it is ill served by institutionalised neglect of its importance.”

Third, there may be adjustments in budget allocations *within* institutions. The reforms to the New Zealand public sector in recent years have focussed on improved efficiency. Performance indicators in both research and teaching have become the norm. A range of indicators are usually mentioned in Annual Reports and other documents. In practice, in universities at least, most stress is placed on research performance. Duhs and Duhs (1994b, 499) argue that “the institutionalised reward structure is clearly biased in favour of research effort.” There may need to be greater emphasis on teaching performance in the future. Greater weighting will have to be given to teaching in promotions and university awards. Similarly, international student demands for a high quality learning environment may also require adjustments in funding for student facilities. This would include not just accommodation services, catering services, international student centres, English language centres, computing services, but also improvement in the resources designed primarily for students (rather than staff) in libraries.

We conclude that the growth of the education export industry will impact significantly on the evaluation of teaching quality. It will also lead to incentive and budget changes reflecting a greater emphasis on teaching.

#### **4. RECENT ISSUES**

Two recent issues have emerged that must be taken into account in projections of the growth of tertiary education exports. The first is the South-East Asian financial crisis of 1997/98 which has seen major exchange rate realignments, especially in the cases of Indonesia and Thailand. The second factor is the critical press coverage given in Asia to the rise of the One Nation Party in Australia.

Let us turn to the Asian economic crisis first. The effect of the crisis within the Asian countries affected has been economic contraction, reduced income of those with jobs, significant unemployment, riots, political instability (especially in Indonesia and more recently Malaysia), and reduced expectations. The impact of the crisis was felt throughout the world during 1998 and it may yet induce a world depression. One effect

outside of the countries in immediate crisis has been a marked reduce demand for imports in the countries in crisis (exports from other countries like New Zealand); there has been a decline in the number of Asian students studying abroad (education exports have declined from non-crisis countries, like New Zealand, to the countries in crisis). In Britain it has been reported that in 1998 “There was a 12 per cent drop in recruitment [of all international students] across undergraduate and postgraduate levels, with the highest reductions from Malaysia (44 per cent), [South] Korea (23 per cent), Thailand (29 per cent), Singapore (19 per cent) and Indonesia (19 percent)” (Tysome 1999, 9).

While this decline has been felt in most countries, New Zealand has done better than many other countries for two reasons. First, over the period of the Asian crisis, the New Zealand currency also declined relative to countries with strong exchange rates like the USA and the UK. In other words, the cost of the substitutes for a New Zealand tertiary education became dearer; or, in relative terms, the cost of education in New Zealand became cheaper. International students have tended to substitute away from the more expensive universities in the USA and the UK.<sup>13</sup> Indeed, the UK universities had been hit so hard that, by August 1998, there were reports of “bargain basement one-year deals” to retain students (Tysome 1998). Second, the premium which was once accorded to the top universities in the USA and UK may have become a luxury that cannot be afforded in times of austerity. In the short term therefore, New Zealand may be able to *increase* its share of the remaining education market.

As shown in Table 1(a), 1998 witnessed a decline of 5 per cent in international enrolments in New Zealand tertiary institutions. Full-fee-paying tertiary students declined by 7 per cent in the same period. This means that the growth path of the export industry has been interrupted. But the Asian crisis is almost certainly temporary and growth in education exports will resume shortly. The education export industry will do best with a low or even falling New Zealand dollar. So the future of the industry depends on not just the ending of the Asian crisis but how the New Zealand dollar fares over the next few years. Our projections of renewed growth of education exports implicitly assume no major increase of the New Zealand exchange rate.

An equally important factor in the growth of student numbers is the perception that Australia may be a racist country where Asian students are not safe (see Osmond 1998). As Asian parents reassess whether to send their children to Australia, New Zealand stands to benefit considerably. As Tysome points out “Australia’s universities suffered from the electoral success of Pauline Hanson’s One Nation Party, which was deeply opposed to Asian immigration” (1999, 8). The weaker performance of the One Nation Party at the recent federal election in Australia may counteract this trend somewhat. Nevertheless, suitable recruiting drives in Asia at this time by New Zealand tertiary education institutions may prove to bear considerable fruit. This raises the question of the financing of this marketing. In August 1998 the Australian government committed \$21 million to support the marketing and promotion of Australian education through its

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<sup>13</sup> A similar pattern has been observed in Australia. “About 10 per cent of the students enrolling through the Asian offices of university recruiter IDP Education Australia have changed from the UK and US universities to Australia [in 1998]” (Illing 1998, 33).

marketing arm, Australian Education International (Maslen 1998). Should New Zealand be doing something similar (but proportional to its GDP)?

In short, New Zealand may be well placed to benefit from some recent events outside of the country.

## **5. CONCLUSION**

The switch to a “trade” approach to international tertiary students has worked in New Zealand. A new industry has developed since 1988. The exact size of the industry is hard to establish, but it is large -- we have estimated some \$400 million per year. It may have stalled in 1998 but it is set to resume growth shortly.

We have argued in a number of places that more information on the New Zealand export industry should be made available (see Alvey, Duhs, and Duhs forthcoming; Alvey 1998). It is beyond comprehension why Statistics New Zealand presents information on the export of flowers (about \$40 million in 1997) but does not even hazard a guess at what the balance of payments implications of the tertiary education export industry are in the same year (*New Zealand Official Yearbook 1998* p. 512). At a time when there is great public concern about the consistent current account deficits, one would think that great efforts would be made to investigate the negative and positive elements of these accounts. The “invisible” part of the current account, which includes services, has run a persistent deficit in recent years, yet education exports are creating a positive contribution. One would think that the growth of education exports in the invisible account ought to be closely monitored: it may be one major means of overcoming the current account problems.

Other government agencies also need to look at their information-gathering duties. Why is it that a few years ago the New Zealand Immigration Service decided to stop monitoring the number of international arrivals that are primarily for education? It is also very disappointing that many of the New Zealand universities were unable to cooperate with the authors of the present study.

Clearly further work needs to be done to improve the collection of raw data on the export of tertiary education services in New Zealand. Only after this information is made available can we turn to more complex issues such as the determination of the size of the expenditure multiplier, and pricing and marketing issues. What is the precise size of the expenditure multiplier? Surveys of expenditure patterns of international students should be undertaken. What is the “correct” fee? As tertiary fees for international students are supposed to be based on marginal costs, New Zealand economists should take up the challenge of trying to determine if tertiary fees are “correct.” Finally, given the recent economic problems in Asia, we should turn to

analyse the composition of international students. Is New Zealand too dependent on Malaysia for international students? What are the alternative sources of supply? How successful have N.Z. marketing efforts been? But answers to these questions require that basic information be provided by institutions and government. Over the past eighteen months some progress has been made in our investigation of the New Zealand education export industry. Nevertheless, we still remain at a relatively early stage of the investigation.

## APPENDICES

**Table 1a: All International and Full-Fee-paying International Students in all Tertiary Institutions**

Year	All International Students	All Full-Fee-paying International Students	Percentage fee-paying: Total
1989	3604	886	24.58
1990	3471	603	17.37
1991	3057	879	28.75
1992	4835	1963	40.60
1993	4911	2131	43.39
1994	5567	2935	52.72
1995	6742	4101	60.83
1996	6034	4901	81.22
1997	7587	6206	81.80
1998	7221	5766	79.85

Sources: *Tertiary Education Statistics* various years and Department of Education.

Note that grand-parenting or transition of overseas students enrolled prior to 1989 to N.Z. student status may have affected the numbers of full-fee-paying students in 1990.

**Table 1b: All International and Full-Fee-paying International Students in Universities**

Year	All International Students	All Full-Fee-paying International Students	Percentage Fee-paying: Total
1989	3310	675	20.39
1990	2842	333	11.71
1991	2512	547	21.78
1992	2952	984	33.33
1993	3194	1450	45.40
1994	3744	2120	56.62
1995	4562	3178	69.66
1996	4681	3789	80.94
1997	5055	4014	79.41
1998	4844	3695	76.28

Sources: *University Summary Statistics* various years; *Tertiary Education Statistics* various years; and Department of Education.

Note that grand-parenting or transition of overseas students enrolled prior to 1989 to N.Z. student status may have affected the numbers of full-fee-paying students in 1990.

**Table 1c: All International and Full-Fee-paying International Students in Polytechnics**

Year	All International Students	All Full-Fee-paying International Students	Percentage fee-paying: Total
1989	294	211	71.77
1990	629	270	42.93
1991	522	332*	63.60
1992	1855	972	52.40
1993	1629	667	40.95
1994	1761	795	45.14
1995	2091	884	42.28
1996	1288	1049	81.44
1997	2442	2112	86.49
1998	2257	1959	86.80

Sources: *Tertiary Education Statistics* various years; *New Zealand Polytechnic, College of Education, and Teacher Trainee Summary Statistics 1991*; and Department of Education.

Note that grand-parenting or transition of overseas students enrolled prior to 1989 to N.Z. student status may have affected the numbers of full-fee-paying students in 1990.

\* Note that this figure is adjusted to include “not stated.”

**Table 1d: All International and Full-Fee-paying International Students in Colleges of Education**

Year	All International Students	All Full-Fee-paying International Students	Percentage fee-paying: Total
1989	N/a	N/a	N/a
1990	N/a	N/a	N/a
1991	23	N/a	N/a
1992	28	7	25.00
1993	88	14	15.91
1994	62	20	32.26
1995	88	39	44.32
1996	65	63	96.92
1997	90	80	88.89
1998	119	111	93.28

Sources: *Tertiary Education Statistics* various years; *New Zealand Polytechnic, College of Education, and Teacher Trainee Summary Statistics 1991*; and Department of Education.

Note that grand-parenting or transition of overseas students enrolled prior to 1989 to N.Z. student status may have affected the numbers of full-fee-paying students in 1990.

**Table 2: Revenue from International Full-Fee-Paying Students**

Year/Institution	Revenue From All International Fee-paying Students	Operating Revenue	% of Operating Revenue from International Student Fees
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**Massey University**

1992	0.5m	124.6m	0.40%
1993	0.9m	140.2m	0.64%
1994	2.0m	151.2m	1.32%
1995	3.9m	165.0m	2.36%
1996	3.9m	199.9m	1.96%
1997	4.7m	208.2m	2.26%

Source: Massey University *Annual Financial Statements*, advice from Finance Section, Registry, and the International Students' Office, Massey University.

**University of Canterbury**

1992	2.4m#	99.0m	2.42%
1993	1.9m#	106.6m	1.78%
1994	2.4m#	107.5m	2.23%
1995	3.0m#	108.7m	2.76%
1996	3.6m#	110.3m	3.26%
1997	4.5m#	107.5m	4.19%

Source: *Annual Report* for University of Canterbury and quarterly accounts for 1997.

# Includes students supported by foreign aid schemes. This inflates the real economic effect of the shift to full-cost fees.

**University of Otago**

1992		128.8m	
1993	2.9m	127.7m	2.27%
1994	5.5m	142.1m	3.87%
1995	9.0m	150.2m	5.99%
1996	12.8m	159.7m	8.02%

Source: University of Otago, Research and International Section.

**University of Waikato**

1996	5.5m#	126.9m	4.33%
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Source: *Annual Report* for University of Waikato 1996.

#Not clear if this includes revenue from those on NZ government scholarships.



**TABLE 3: NZEIL Estimate of Source and Distribution of Foreign Exchange for Education Exports in 1997**

	<i>Forex Rate</i>	<i>Forex Multiplier</i>	<i>Forex \$NZ '000</i>	<i>Students 1997</i>	<i>Notes</i>
<b>DIRECT EDUCATION FOREX</b>					
Forex - Secondary Full-fee	\$8,000	2.67	\$116,732	5465	1
Forex - Secondary Exchange '96	\$8,000	1.67	\$7,041	527	2
Forex - Secondary ODA '96	\$8,000	0.2	\$493	308	3
Forex - Japanese Study Tour	\$2,100		\$11,170	5319	4
Forex - Universities Full-fee	\$12,293	2.5	\$123,360	4014	5
Forex - Universities Exchange '96	\$12,293	1.5	\$4,296	233	2 & 5
Forex - Universities ODA '96	\$12,293	0.2	\$1,967	800	3 & 5
Forex - Polytechnics Full-fee	\$11,858	2.5	\$62,610	2112	5
Forex - Polytechnics Exchange '96	\$11,858	1.5	\$427	24	2 & 5
Forex - Polytechnics ODA '96	\$11,858	0.2	\$714	301	3 & 5
Forex - Coll of Education Full-fee	\$12,000	2.5	\$2,400	80	5
Forex - Coll of Education ODA '96	\$12,000	0.2	\$24	10	3 & 5
Forex - ELS (State & Private)	\$2,544	2.67	\$125,654	18499	6
Forex - Private Tertiary & Training	\$12,293	2.5	\$23,818	775	7
<b>TOTAL DIRECT EDUCATION FOREX</b>			<b>\$480,706</b>	<b>38467</b>	
Full-Fee Forex			\$454,575	30945	
Exchange/ODA Forex			\$14,962	2203	
Study Tour Forex			\$11,170	5319	
<b>TOTAL DIRECT FOREX</b>			<b>\$480,706</b>	<b>38467</b>	
<b>INDIRECT EDUCATION FOREX</b>					
All Students holiday Forex (2 weeks @ \$500/wk)	\$500	2	\$38,467		8
Family tourism (full-fee only)	1 per 10% ff @ \$3,000		\$9,051		9
NZIS Revenue (GST exempt)	\$150		\$5,770		10
Int Airfares (GST exempt) – 20% of full-fee students	\$1,000		\$6,034		11
<b>TOTAL INDIRECT FOREX</b>			<b>\$59,322</b>		
<b>TOTAL FOREX</b>			<b>\$540,028</b>		
				Percentage	
Government GST			\$58,692	11%	
Ministry of Educ Claw-back			\$2,186	0%	
NZIS fees (@\$150 per student)			\$5,770	1%	
<b>TOTAL Govt Income</b>			<b>\$66,648</b>	<b>12%</b>	<b>12</b>
Net Income – Secondary			\$39,907	7%	
Net Income - Secondary Study Tours			\$6,603	1%	
Net Income – Universities			\$43,861	8%	
Net Income – Polytechnics			\$22,261	4%	
Net Income – CoE			\$853	0%	
Net Income - Private Tertiary			\$8,469	2%	
Net Income - ELS (State & Private)			\$44,677	8%	
<b>TOTAL Industry Income</b>			<b>\$166,631</b>	<b>31%</b>	<b>13</b>
External Spending – Secondary			\$68,366	13%	14
External Spending – Sec Study Tours			\$3,326	0%	14
External Spending – Universities			\$71,359	13%	14
External Spending – Polytechnics			\$34,406	6%	14
External Spending - Coll of Educ			\$1,301	0%	14
External Spending – Private Tertiary			\$12,703	2%	14
External Spending – English Language			\$67,016	12%	14
External Spending – holidays			\$34,193	6%	15
External Spending – airfares			\$6,034	1%	16
Family Tourism			\$8,045	1%	17
<b>TOTAL non-Industry Income</b>			<b>\$306,749</b>	<b>57%</b>	<b>18</b>
<b>TOTAL FOREX</b>			<b>\$540,028</b>	<b>100%</b>	

This table was kindly provided to us by Mr John Sargent of NZEIL.

Notes on the Source and Distribution of Foreign Exchange for Education Exports in 1997

1. Student numbers sourced from the Ministry of Education and are the numbers advised to the Ministry by institutions in their July returns. The average tuition fee is calculated from the course fees published by institutions in the NZEIL Handbook of courses and costs. The forex multiplier of 2.67 is an assessment of the ratio of the cost of living in New Zealand compared with the average tuition fee. The multiplier has been determined using survey techniques and interviews with international students. Some further work needs to be done to refine this figure. The total forex earned is calculated by multiplying student numbers by average tuition fee by forex multiplier.
2. Exchange student numbers sourced from the Ministry of Education and are the numbers advised to the Ministry by institutions in their July returns. The average tuition fee is calculated from the course fees published by institutions in the NZEIL Handbook of courses and costs. The forex multiplier of 1.67 is an assessment of the ratio of the cost of living in New Zealand compared with the average tuition fee and assumes that students do not pay tuition fees but that the costs of living are the same as for full-fee international students.
3. ODA student numbers sourced from the Ministry of Education and are the numbers advised to the Ministry by institutions in their July returns. Because the various scholarships provided by the Ministry of Foreign Affairs and Trade cover tuition and living expenses, the forex multiplier has been set at 0.2 only to estimate a small amount of foreign exchange provided by these students.
4. The Japanese Study Tour numbers have been provided by the New Zealand Embassy in Tokyo and are based on a 1997 survey re overseas school excursions by "The Japan School Tours Bureau". The average tuition fee does not include international airfares.
5. Student numbers sourced from the Ministry of Education and are the numbers advised to the Ministry by institutions in their July returns. The average tuition fee is calculated from the course fees published by institutions in the NZEIL Handbook of courses and costs and from data supplied by institutions stating the courses being attended by their international students. The forex multiplier of 2.5 is an assessment of the ratio of the cost of living in New Zealand compared with the average tuition fee. The multiplier has been determined using survey techniques and interviews with international students. Some further work needs to be done to refine this figure. The total forex earned is calculated by multiplying student numbers by average tuition fee by forex multiplier.
6. There is no official data available on English Language student numbers. This data has been estimated from a quarterly survey conducted by IDC New Zealand Ltd seeking student numbers and the tuition hours taught. The survey includes both state and private institutions who provide English language instruction for international students. The foreign exchange earnings is based on the tuition hours delivered to international students and not on student numbers. The calculations assume an average tuition fee of \$325 per 25 hour week. The multiplier is the same as for secondary schools.
7. This data has been supplied by the Ministry of Education from the July returns made by all Private Training Establishments. The large 'Other' number is because the Ministry data only identified a few major countries. These numbers exclude English Language students.
8. It has been assumed that all students stay for an average of two weeks in addition to their formal course programmes. This is made up of some days prior to course commencement, some days after final examinations and semester breaks. This has been valued at \$500 per week. There is some evidence to show that, particularly in the English language sector, students often stay for up to another 3 months in New Zealand.
9. It has been assumed that 10% of the full-fee formal students are visited by family or friends during the year. It has also been assumed that these tourists spend on average \$3000 each.
10. All students require a visa -- either a student or visitor visa -- to enter New Zealand. Visas need to be renewed regularly and it has been assumed that all students will require an annual interaction with the New Zealand Immigration Service at a rate of \$150.
11. It has been assumed that 20% of the full-fee formal international students come to New Zealand on Air New Zealand and that they pay an average fare of \$1000.
12. Government income includes GST, the Ministry of Education claw-back of \$450 per full-fee international student and NZIS revenue. No attempt has been made to estimate or include the dollar value of services billed by Tradenz to the education industry for services rendered in the marketing of New Zealand education services overseas.
13. These figures are the tuition fees received by institutions less GST and claw-back.
14. These figures show the forex spent on living costs by the students in each sector. Living costs include accommodation, meals, entertainment, travel and other personal spending.
15. See also Note 8. This figure does not include GST.
16. See also Note 11. It has been assumed that international airfares are GST exempt.
17. See also Note 9. This figure does not include GST.
18. This shows the total foreign exchange expenditure by international students to the New Zealand economy other than the education and government sectors.

**Table 4a: All International Students in New Zealand Tertiary Education by Level of Course**

Course	1992	1993	1994	1995	1996	1997
Doctorate/ Higher doctorate	250	215	218	202	220	283
Masters	322	317	363	423	396	399
Bachelor honours	105	47	71	65	51	96
Postgraduate diploma	242	252	265	298	289	304
Postgraduate Certificate	7	5	5	48	4	13
Bachelor pass	1783	2278	2797	3440	3760	4191
Diploma	207	317	319	307	430	674
Other	1752	1766	1828	1590	1356	1627
Total*	4439	4911	5567	6742	6034	7587

Source: *Education Statistics of New Zealand* various years.

\* excludes multiple enrolments.

**Table 4b: All International Students in New Zealand Universities by Level of Course**

Course	1992	1993	1994	1995	1996	1997
Doctorate/ Higher doctorate	232	198	204	177	217	236
Masters	289	279	306	366	391	394
Bachelor honours	103	37	50	61	50	86
Postgraduate diploma	197	181	194	219	272	298
Postgraduate Certificate	3	0	1	2	4	13
Bachelor pass	1436	1796	2178	2635	3283	3420
Diploma	12	15	10	9	10	24
Other	231	129	161	322	454	584

Source: Department of Education.

**Table 5a: Country of Source for all Tertiary Institutions**

All International Students by Country of Birth	1992	1993	1994	1995	1996	1997	1998
Asia/Middle East	1778	2193	2875	3819	4408	5542	5101
Europe	167	187	379	360	279	394	449
Africa	68	69	109	102	71	60	78
Americas	219	193	261	297	267	320	416
Pacific Islands (including Australia)*	1435	2058 (638)	1881 (662)	1549 (368)	961 (34)	1179 (-)	1111 (-)
Other (not stated)	207	211	62	615	48	92	66
Total	3874	4911	5567	6742	6034	7587	7221

Source: *Tertiary Education Statistics* various years; Department of Education; NZEIL.

\* Australian students are now treated as local students.

**Table 5b: Country of Source for Universities**

All International Students by Country of Birth	1992	1993	1994	1995	1996	1997
Asia/Middle East	1330	1457	1961	2693	3437	3741
Europe	89	118	173	207	244	293
Africa	61	56	78	79	66	50
Americas	172	166	216	247	253	288
Pacific Islands (including Australia)*	826	1347 (531)	1271 (555)	881 (222)	644 (34)	619 (-)
Other (not stated)	25	50	45	455	37	64
Total	2503	3194	3744	4562	4681	5055

Source: *Tertiary Education Statistics* various years; Department of Education.

\* Australian students are now treated as local students.

**Table 6a: The Importance of Tertiary Students from Malaysia**

Malaysian students as a % of	1993	1994	1995	1996	1997	1998
All international students	15.37	19.74	25.35	38.45	32.63	28.78
Asian students	34.43	38.23	44.75	52.45	44.86	40.73

Source: *Tertiary Education Statistics* various years.

**Table 6b: The Importance of University Students from Malaysia**

Malaysian students as a % of	1993	1994	1995	1996	1997
all international university students	18.03	23.50	31.89	43.41	40.95
Asian university students	39.53	44.88	54.03	59.12	55.62

Source: *Tertiary Education Statistics* various years.

**Table 7: International Full-Fee-paying Students in New Zealand Universities**

Institution/ Year	Total Enrolment	No. of Full-Fee- paying Internat'l Students (excludes ELICOS)	No. of Full-Fee- paying Internat'l ELICOS Students	No. of Postgrad. Full-Fee- Paying Internat'l Students	First Three Countries of Origin of all Internat'l Students in 1996	Sub-fields of study (in 1996)
UA	1992 20,772 1993 22,573 1994 24,009 1995 24,892 1996 25,829 1997 25,780 1998 26,110	163 274 421 499 595 663 637	187 75 101	25 11 23 40 70 91	Malaysia (184) Hong Kong (83) Singapore (49)	Business Admin. (213) General Arts (103) General Sciences (85)
U W	1992 9,460 1993 10,336 1994 10,681 1995 11,052 1996 11,465 1997 12,215 1998 12,542	68* 111* 205* 216* 349* 457* 369 (may include ELICOS)	273 487	5 17 49 47 67 66	Malaysia (166) Japan (30) Thailand (30)	Business Admin. (189) General Arts (37) Sociology 28)
MU	1992 24,765# 1993 27,531# 1994 28,684# 1995 29,572# 1996 29,846# 1997 32,338# 1998 32,393#	88** 151** 252** 391** 542** 601** 546**		34 30 39 51 63 87	Malaysia (194) Japan (67) Hong Kong (55)	Business Admin. (320) General Arts (55) General Sciences (54)
VUW	1992 11,306 1993 11,642 1994 12,358 1995 12,857 1996 13,082 1997 13,752 1998 13,946	266+ 321+ 332+ 305+ 351+ 325+ 353+	252 302 274 290	36 77 90 71 80 50	Malaysia (90) Japan (29) Fiji (27)	Business Admin. (118) General Arts (98) General Science (31)

Institution/ Year	Total Enrolment	No. of Full-Fee- paying Internat'l Students (excludes ELICOS)	No. of Full-Fee- paying Internat'l ELICOS Students	No. of Postgrad. Full-Fee- paying Internat'l Students	First Three Countries of Origin of all Internat'l Students in 1996	Sub-fields of study (in 1996)
UC	1992 10,732 1993 10,689 1994 11,012 1995 11,214 1996 11,352 1997 12,169 1998 12,528	74 74 113 212 295 386 381		21 18 12 28 31 37	Malaysia (147) Singapore (23) Indonesia (22)	Business Admin. (83) Engin'ing (66) General Spectrum (50)
LU	1992 3,215 1993 3,511 1994 3,698 1995 3,949 1996 4,146 1997 4,106 1998 3,918	199 277 341 473 660 637 658		14 15 29 37 41 77	Malaysia (494) Singapore (30) Thailand (27)	Business Admin. (587)
UO	1992 13,014 1993 14,289 1994 15,028 1995 15,512 1996 15,905 1997 16,206 1998 17,222	126 242 468 804 997 945 751		71 67 121 158 160 150	Malaysia (754) USA (47) Germany (36)	Business Admin. (551) Medicine (80) General Science (50)

Source: *Tertiary Education Statistics* various years; university annual reports; Department of Education; NZEIL; University of Otago Research and International Section.

UA = University of Auckland; UW = University of Waikato; MU = Massey University; VUW = Victoria University of Wellington; UC = University of Canterbury; LU = Lincoln University; and UO = University of Otago.

# A large number of these are extramural (distance education) students

+ The Victoria University of Wellington *Annual Report and Financial Statements* show that full-cost fee paying degree students were: in 1992, 303; in 1993, 316; in 1994, 291; in 1995, 231; in 1996, 218; in 1997, 260.

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## Chapter Two

### OFF-SHORE DELIVERY OF EDUCATION: ALTERNATIVE MEDIA

by  
Tom Prebble

#### ABSTRACT

The last ten years have seen a steady growth in the numbers of international students travelling to New Zealand to pursue their studies. Meeting this market has dominated the attention of policy makers and institutional leaders. Another option open to New Zealand institutions is to export their programmes and services to where the international students live. This paper will examine the main delivery and servicing alternatives open to institutions in their efforts to export their programmes. Each of these alternative delivery modes has its own implications for policy-making, generally at an institutional level, but sometimes at a sectoral or national level. These implications will be identified and discussed.

#### 1. GOVERNMENT VIEW

- NZ is a trading nation reliant on its ability to export more than it imports.
- Education is a commodity as well as a service, and it should be used to generate revenue for the country.
- The export of education by distance education should provide a cost-effective way to generate additional revenue streams for educational institutions, while allowing them to manage the numbers of international students studying by conventional means.
- The growth of a strong international distance education market will offer low-cost alternatives for New Zealand consumers and also force local providers to lower their unit costs and fees to match those of off-shore providers of distance education.

#### 2. ALTERNATIVE DELIVERY OPTIONS

Currently there is a range of alternative arrangements by which New Zealand educational institutions can 'export' their wares: direct sale of course materials or programmes to off-shore educational institutions; entering into partnership arrangements for the delivery of teaching off-shore; joining a consortia of educational

providers; off-shore enrolment in New Zealand distance education programmes; participation in Virtual University projects.

### **2.1 Direct sale of course materials or programmes to off-shore educational institutions.**

The direct sale of course materials or programmes to off-shore educational institutions is self-explanatory.

- **Market:** Distance education institutions in other countries who find it more economical to purchase course packages than to develop their own.
- **Advantages:** A relatively passive, low-risk option with minimal outlay of effort, and a moderate one-off payment or recurrent income stream.
- **Disadvantages:** Few opportunities for sales; unlikely to yield strong return; need to limit the liability of the institution for the end use of the material.

### **2.2 Partnership Arrangements for the Delivery of Teaching Off-shore.**

In this arrangement a New Zealand institution provides registration to its qualification, distance education materials, monitoring of quality and of assessment, and possibly short tutorial blocks. The off-shore partner provides marketing and recruitment, tuition of local students, and assessment.

- **Market:** Significant opportunities in South-East Asia, especially for first degrees in business and information systems.
- **Advantages:** Allows good quality assurance; allows each party to concentrate on its particular strengths.
- **Disadvantages:** Relatively high unit costs; difficulty to generate normal economies of scale of distance education; places high demands on New Zealand teaching staff for travel and assessment; usually necessary to revise course materials for each new market.

### **2.3 Consortia of Educational Providers.**

Where institutions set up credit exchange agreements within a network of institutions to facilitate the flow of students amongst them. Normally they will each retain their own qualifications, but increasingly consortia among distance education institutions are offering a joint qualification. Examples of this mode include Open Learning Australia, Open Learning Agency (British Columbia), and the abortive Pacific Rim Studies Network.

- **Market:** An as yet not fully tested assumption that there is a market for such conjoint qualifications.
- **Advantages:** Allows smaller providers to offer specialist programmes to a wider audience; allows some sharing of the costs of administrative and marketing overheads.
- **Disadvantages:** Opens up an institution's market to competition among the members of the consortium; reduces the discretion and autonomy of members of the consortium; high compliance costs in terms of quality assurance and standardisation of practices.

## **2.4 Off-Shore Enrolment in New Zealand Distance Education Programmes**

Where individual institutions compete for international distance education students and attempt to offer the full range of services to students. This may be through correspondence methods, teleconferencing, or the Internet.

- **Market:** Moderately strong in specialist areas; highly competitive in mainline degree subjects. International fees for distance education programmes are generally one half to two thirds of those for campus-based study.
- **Advantages:** Allows an institution to manage its own services and its own risk exposure. Allows it to market its specialities to an international market.
- **Disadvantages:** Difficult and expensive to market one's programmes; difficult and expensive to ensure consistent standards of service to all students; places high demands on tutorial staff to support students with high expectations of service but variable entry standards; difficult to recruit sufficient numbers to offer regional support to international students.

## **2.5 Participate in Virtual University projects**

In this arrangement an institution joins forces with other institutions and corporates to establish large, Web-based educational institutions which will operate relatively independently from the member institutions. An example is the Western Governors University.

- **Market:** Probably an enormous international market for low-cost, low touch educational programmes.
- **Advantages:** An institution can participate in an enterprise that might potentially offer services to many times its current enrolment; allows some sharing of the costs of administrative and marketing overheads; shared expertise in a new delivery medium.

- Disadvantages: High capital investment for an uncertain return; difficult for a conventional bi-modal provider to participate; loss of institutional autonomy; may threaten one's conventional enrolment base.

A variant of this model would be for New Zealand educational institutions to set up their own New Zealand Virtual University. Worth considering, but the advantages of fielding a small 'national team' in a global market may not be strong.

### **3. Teaching and Support Media**

- Correspondence supplemented by blocks of face-to-face tutorial support. The cost of providing an adequate level of local support may be almost prohibitive except where there are large concentrations of students.
- Synchronous telecommunications. Classrooms linked by audio/video/videographics. Appeals to certain advanced-level sectors of the professional education market. Problems with time zones, difficulties in scaling-up, and high telecommunication charges.
- Asynchronous telecommunications. Web-based delivery of tuition and communications services. Supports independent study, and offers strong economies of scale, but requires constant support from tutorial staff.
- Satellite Communications. The development of satellite communications has made it easier for institutions to reach an international audience with synchronous and asynchronous telecommunications, and particularly with broadcasting, but the transmission system does not alter the demands on the teacher or the learner.

### **4. Policy Issues for Institutions**

- Selecting the right mix of programmes, media, delivery options and markets. This requires a corporate approach. Not safe for any institution to adopt a *laissez-faire* approach in terms of managing risk.
- Costing and Pricing. Different delivery scenarios have very different cost implications. International market tends to expect lower fees for distance education courses, whereas New Zealand distance education institutions have developed their programmes on an expectation of equivalent funding and costs. This poses challenges and risks for New Zealand providers which are also seeking to protect their present funding environment.
- Quality Assurance. It is relatively easy to deliver a low quality distance education programme to an international market. It is extremely difficult to re-establish an institution's reputation once it has been squandered through such efforts. One important quality assurance issue is security: ensuring security of processes of validation of entry qualifications and examining students; and securing teaching material against theft and piracy.

- Organisational infrastructure and culture. The provision and support of off-shore distance education is likely to place new demands on existing institutional structures. Institutions need to consider whether their existing structures will support these efforts or whether they want to re-organise to do so; or whether they need to acknowledge that this is not their core business.
- Legal implications: Risk management; copyright; intellectual property of an institution's material and disbursement of revenue; variations in legal environment of target markets (an example is the Hong Kong Educational Ordinance, 1997).
- Planning for the short, medium and long term.

## **Chapter Three**

### **EXPORT OF TERTIARY EDUCATION: PRICING ISSUES PLUS COSTS AND BENEFITS**

by  
**Gary B. Buurman**

This paper sets out a series of theoretical issues relating to the export of tertiary education and suggests that empirical work should be undertaken as a follow-up. Specific topics addressed include the difference between domestic and overseas students, the problems of efficient pricing in setting fees for overseas students and the costs and benefits of the export of tertiary education both to the educational institution and to the society of the exporter.

#### **1. INTRODUCTION**

Since the election of the Labour Government in New Zealand in 1984, a change in the philosophy of economic management involved freeing up the economy from regulation and massive restructuring. This meant that the education sector was (and is) more able to take advantage of opportunities in international markets. However, impediments to market forces in the actual education exporting institutions (academic tenure, the union movement, resistance to change, and so on) can cause cost disadvantages, which could harm New Zealand's competitive position. Thus a particular course or paper offering might be crowded because it is publicly funded and the extra expense of providing additional places cannot be recouped by an academic department. Reduced public funds constrain space and the structure of tertiary institutions (including impediments to market forces) can limit rewards to innovative departments. This is why pricing issues, as well as a discussion of costs and benefits of the export of tertiary education, are important.

The proper incentive system is an important part of a strategy to increase the sale of tertiary education. Not only must an educational institution have incentives to pursue this strategy, but departments and individuals should be rewarded for mounting programmes and new initiatives.

Recent literature on the sale of tertiary education services, as it relates to Australia and New Zealand, refers to the 'aid' and 'trade' approach to international tertiary students (for example see Duhs and Duhs 1997, 160). New Zealand's aid approach began through sponsoring students under the Colombo Plan in 1950. The trade approach was introduced with the announcement of a new fee structure in 1989 where international students were to be charged full-cost costs. The extent to which education had previously been used for foreign aid purposes is shown by the standard tuition fee for

overseas tertiary students in 1987 of \$264; this compared to an estimated average cost per student of \$8,500-\$10,000 (Treasury 1987, 262).

The New Zealand Treasury's *Brief to the Incoming Government* (1987, 262) pointed out that equity considerations are also related to the aid approach. The majority of overseas students came from the wealthier segments of the population of the wealthier developing countries. Since the idea of foreign aid is that it should benefit the less well-off, there were doubts that the existing approach was serving this objective. This (as well as commercial motives) prompted a switch in policy to the trade-related approach in tertiary education.

There is the potential that the export of New Zealand's educational services at the tertiary level can turn into a significant source of export receipts. Yet because these services are provided mainly from public funds, more than just commercial considerations are at stake: political issues and the question of who should receive the benefits of government expenditure are also important. The remainder of this paper is divided into three sections which consider the following interrelated areas:

- i) Supply and demand: domestic and overseas students.
- ii) Pricing issues and difficulties.
- iii) The costs and benefits of exporting education to foreign students.

A brief conclusion then follows.

## **2. SUPPLY AND DEMAND: DOMESTIC AND OVERSEAS STUDENTS**

The sale of tertiary education is affected by supply and demand. The number of students wanting to travel overseas for education can be influenced if they do not see their own country's education system as particularly desirable, or if there are a lack of available places. For foreign students, New Zealand may have a number of advantages on the demand side in terms of having an English speaking system, a good environmental image, and a high level of safety.

### **2.1 Government intervention in the domestic market**

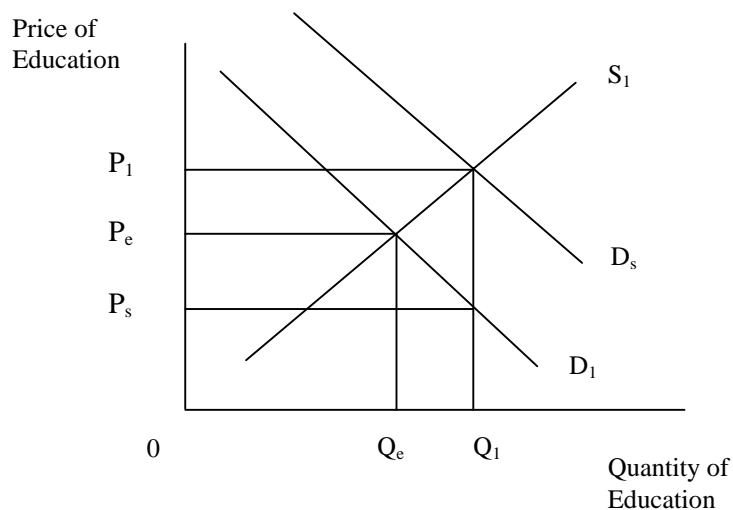
In very general terms, quantities of tertiary education could be allocated by market forces through supply and demand, as in Figure I below.

If left to the market model, the private demand curve of educational consumers is shown as  $D_1$ . Individuals would be willing to pay for education because of higher expected future earnings which could arise from actual acquired skills, or screening, or other factors (see Maani 1997, 36-47). Profit maximizing tertiary institutions produce education according to the supply curve,  $S_1$ . The market would clear at the equilibrium price,  $P_e$ , with a corresponding quantity of education services consumed,  $Q_e$ . However, as is well known (see Haveman 1976, 36; Maani 1997),  $Q_e$  would be less than the efficient amount of education for society because of distributional, as well as market failure, arguments. Chief among the latter are externalities. In the case of externalities



in education, spillover benefits are conferred on society which are not incorporated into the market price of the product. That is, the private consumer of education cannot charge compensation for the social benefits his/her education provides. Examples of these spillovers include: the lower likelihood that educated people will draw on social welfare or commit crimes, hence less public funds are needed to support them. Educated people also raise the productivity of complimentary factors of production, contribute new knowledge through research and innovation, and contribute to the creation of a more flexible labour force. Thus, at the margin, social benefits are likely to be higher than private benefits. Given this argument, society's demand curve for education (which includes both private and social benefits) is shown as  $D_s$  and the efficient amount of education consumed by society as a whole is  $Q_1$ . Students should pay  $P_s$ , institutions receive  $P_1$  and the government cover the difference.

**Figure I**  
**The Market for Education**



Ignoring for the moment the issues related to difficulties in quantifying social benefits, the policy suggested by the model is to subsidise consumers of education by the amount that would shift  $D_1$  out to coincide with  $D_s$ . Note that the analysis stops short of providing free tertiary education, since there is a private benefit to the consumer of education. The model suggests that a payment is required from both students and government.

## 2.2 Foreign students as a special case

The situation changes markedly in the case of the international sale of tertiary education. The key issue is that most foreign students, upon completion of their degree, will live and work outside of the country providing the education. Benefits (and costs) to the provider (exporting) country are still possible during the students' course of study (or if some remain and work in the exporting country, or even if they return home). Despite this, a simple analysis suggests that when students return to their country of

origin to complete their working lives, any subsidy for externalities should come from the country of origin. This is because the country of origin receives the bulk of the spillover benefits. Suggested possible benefits to the provider country include: trade links; diplomatic ties; and cultural awareness. Unless these are significant, either no, or only a small subsidy from the provider country is required. Provider institutions would charge the subsidized price to domestic students and the full cost to foreign students. Since it is claimed that the international market for tertiary education is extremely competitive, the price to foreign students (under the competitive model) would be equal to marginal and average cost, which includes a normal profit in the long-run.

Of course, claiming that most students return to their country of origin does not mean that all do. An Australian study (Nesdale *et al.* 1995) found that 50% of international students intended to migrate. This does not mean that these intentions will be met, but if students study in New Zealand and then end up migrating here, the social benefits end up in this country. This raises two issues. First, more research is needed on the actual number of foreign students who gain an education and then remain in New Zealand. Second, if the country of origin is likely to reap the bulk of the external benefits, a case could be made for the country of origin to subsidize their students' overseas education (as was the situation in Malaysia). This issue has implications for third world countries lacking human capital and an educational infrastructure.

### **3. PRICING ISSUES AND DIFFICULTIES**

The international trend has been a movement away from treating international education as free (in terms of out of pocket costs) to the foreign student (Treasury 1987, 260). The trend is based on a number of factors. Besides the emphasis on commercial motives and the considerations over equity mentioned above, low fees to international students can be seen as a cross-subsidy from the tax payers in the country which provides the education to foreign students. In addition, generally the families of overseas students have not contributed to the tax take of the provider country. Despite the trend away from 'free' education, different provider-nations have different pricing policies.

When we move from the basic analysis as set out in our supply/demand model in Figure I, there are a number of interesting issues related to efficient pricing of international education.

1. The supply of places in education is subject to a high fixed cost component and, following the literature on natural monopoly (see Cullis and Jones 1992, 131), may lead to the conclusion that marginal cost is below average cost. As mentioned by Alvey *et al.* (1998, 5), it is still unclear as to whether the New Zealand government policy is recommending that prices be set at average or marginal cost (even though full-cost pricing has been legislated). Early policy statements seemed to suggest average cost, but later, marginal cost is at least implied. The relationship between average and marginal cost depends to a large extent upon the degree of excess capacity in tertiary institutions and would tend to

be course-specific. Given an ‘uncrowded’ degree program that is already in place for domestic students, the extra (marginal) cost of admitting an international student is low. This might also apply to graduate level papers. Conversely, we might find high marginal costs in ‘popular’ degrees like accounting and engineering. Some examples of fee charges for international students at New Zealand universities, in 1999 are:

**Table 1: 1999 Fees for International Students**

DEGREE/ UNIVERSITY	B.A.	B.Ed.	B. Sci.	Maximum
Auckland	\$11,000	\$12,000	\$15,000	\$26,576.50
Massey	\$10,500	\$12,500	\$15,000	\$30,200
Canterbury	\$10,000	On applic.	\$14,000	\$33,400

A major empirical study of the New Zealand tertiary education sector should be undertaken to establish the average and marginal costs for the sector. Sholeh Maani in *Investing in Minds: The Economics of Higher Education in New Zealand* has begun the economic analysis of tertiary education, but has not looked at this particular aspect.

2. Price affects the demand for tertiary education from overseas students (this is the problem of the price elasticity of demand). The effect of fee increases on student demand is difficult to assess with accuracy because variables held constant in calculating the elasticity coefficient are likely to be highly variable in reality. Nevertheless, in the long-term, fee levels are likely to be a significant factor in a competitive environment and exchange rate changes will affect fee levels. Note also that other factors (accommodation, travel fees, perceived quality, and so on) influence demand.
3. From the point of view of the seller, the export of tertiary education is similar to the export of other services. There is the marketing problem, as well as any special modifications to the product to make it acceptable to an international audience. Nevertheless, to the buyer (like in health care), education has characteristics uncommon in other tradable goods and services. The purchaser cannot resell their education *per se*, must in many cases be present to consume it and the return to education accrues over a long period of time. In addition, the quality of the education service is difficult to measure. These impact on demand-side uncertainty.
4. There is also an aggregation problem in the pricing decision. Should the tertiary institution be charging a fee per paper, a fee for each year of study for a specific degree as in Table I, or the same fee for each paper from the institution?

5. Export of tertiary education is beset with political and emotive issues. Chief among these are that the practice may be seen as taking places away from domestic students, even though current legislation requires ‘no displacement’ of New Zealand students. Further, because domestic places are highly subsidized, domestic students may be viewed as subsidizing foreign students; and provision of education has implications at the diplomatic level. The first two issues (displacement and subsidy) suggest something like full-cost pricing while the third (diplomacy) may not.
6. The measurement of the size of the service sector in the national accounts has proven to be difficult. More attention has been devoted to measuring goods than services. In recent years, more effort has been made to compute the value of services and this should help to further research in this area.

#### **4. THE COSTS AND BENEFITS OF EXPORTING TERTIARY EDUCATION**

These comments on costs and benefits follow the approach used by Johnson *et al.*, (1997), but realign their cost-benefit categories. Some observations relevant to New Zealand are also added.

Calculating the costs and benefits (from an economic perspective) for the ‘trade’ approach to tertiary education is important because it relates to the pricing strategy. Much of the literature on exporting tertiary education proceeds under the implicit assumption that sale at a marginal or average cost price is desirable *per se*. Nevertheless, there are also intangible costs and benefits involved that are difficult to measure. Further, if intangible benefits are significantly higher than costs (the implicit assumption is valid), less than full-cost pricing is in the interests of the provider-nation as a whole (with a subsidy to make up the difference to individual institutions). The critical point is that if New Zealand prices at full-cost, while other countries do not, New Zealand can be at a competitive disadvantage.

Table II (below) sets out some of the costs and benefits of providing tertiary education to an individual institution. A glance at some of the items shows any number of problems associated with quantifying costs and benefits. Nevertheless, this does not mean that an attempt should be abandoned.

**Table II**  
**Some Benefits and Costs to the Institution**

**BENEFITS:**

- i) Fees from international students
- ii) Economies of scale  
larger student numbers provide potential for more course offerings
- iii) Positive external effects  
these include beneficial links with overseas institutions as well as a potential increase in the value of the degree and learning spillovers from a wider student mix on campus

**COSTS:**

- i) Teaching costs  
these include things like the possibility of additional library costs as well as the establishment of extra language classes
- ii) Administration costs  
these include admission and liaison staff costs, advertising (including overseas marketing and travel), plus any staffing costs of a non-academic nature (culture, sports, catering, and so on)
- iii) Plant and Capital costs  
additional academic and non-academic construction
- iv) Negative external effects  
these include congestion costs and any negative affects on degree quality through possible pressure exerted to pass papers by full-fee-paying students

Concerning the benefits to the institution, revenue from fees paid by overseas students are easily measured (even if institutions seek to keep such information confidential). It is more difficult to value economies of scale and positive external benefits, however. Economies of scale refer to (given that domestic demand has been met) the idea that a larger institution may be able to offer courses to domestic students at lower cost. The value of this benefit to the institution would not be calculated simply as the decrease in average cost multiplied by the number of students in the courses. Putting a monetary value on overseas links and a more prestigious degree is also difficult to measure.

Concerning the costs to the institution, the first point is that costs differ between subjects and the level at which the subject is taught. This brings up the aggregation issue again. If pricing is to be related to cost, do we differentiate costs at the degree, departmental or course level?

Teaching costs can be difficult to apportion because, at the tertiary level, lecturers engage in other activities, such as research and administration. Administration costs for the institution are much easier to apportion, given the availability of data, but even here

there are problems determining capital costs due to difficulties with discounting and depreciation allowances. Negative external effects are extremely difficult to quantify.

Table III sets out costs and benefits for the economy as a whole (society). Since the economy as a whole includes costs and benefits to the institution, the net benefit figure from Table II is used as the starting point and wider implications for the economy are then added.

**Table III**  
**Some Benefits and Costs to Society**

**BENEFITS:**

- i) Net benefits to institutions (either positive or negative)
- ii) Expenditure from overseas students and their families  
these include net expenditure (living costs less any income earned) plus associated expenditure (taxes, including GST on tuition fees, and so on and other government fees, travel, any tourism expenditure from the family and government officials)
- iii) Trade and cultural effects  
these include friendship, cultural and diplomatic relations, trade links, and so on.

**COSTS:**

- i) Administrative  
these include visa applications and restrictions, tax returns and other costs associated with overseas students and any family visitors
- ii) Unemployment benefits  
these would occur if an overseas student takes a job from a potential domestic worker
- iii) Any congestion costs in society rather than the institution
- iv) Opportunity costs  
these occur if domestic students are displaced (not allowed by legislation but which could happen in practice) and suffer lower incomes than would have occurred had the foreign student not stayed; further, tax can be sacrificed for the same reason

Concerning social benefits, many of the same estimation problems arise as in the case of institutions. Also note that while expenditure of overseas students and their families is a total with a direct dollar value, it can only be measured indirectly, probably through the use of surveys. Here is another area where a major empirical study could be undertaken.

Concerning social costs, again figures for administration present less difficulties than estimating congestion and the opportunity costs of job displacement.

## **5. CONCLUSION**

This paper has attempted to show that an efficient pricing strategy for the export of tertiary education is a difficult issue. First, there is the motive to maximize revenue. Given that public funding was used for many of the costs that have already been incurred, the universities and the government see the export of tertiary education as a revenue earning exercise. Also, since the level of support from the public sector is falling, this in itself may be a motive to increase overseas student numbers.

Second, efficiency pricing can be looked at from the viewpoint of the economy as a whole. Here calculating the costs and benefits for the 'trade' approach to education are important. From an economic perspective, efficient pricing now means that price should be set a level where the marginal social benefit (MSB) that New Zealand receives from the last overseas student is equal to the marginal social cost (MSC) incurred in educating that student in each paper or degree. For example, if we find significant external benefits from overseas students which are not reflected in the price system, less than full-cost pricing is efficient with government paying (subsidizing) the difference to the institution. While there could be distortions caused by raising revenue to fund the subsidy, the New Zealand government is unlikely to accept this policy in any case.

A third problem emerges when we realize that we are in a very competitive industry (complicated by the fact that many modes of delivery are possible). Hence, New Zealand institutions must be wary of pricing themselves out of the international market.

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## **Chapter Four**

### **ISSUES IN DEVELOPING A PROGRAMME IN AN INTERNATIONAL EDUCATION CONTEXT**

**by  
Wayne L. Edwards**

#### **1. INTRODUCTION**

In this paper, the writer takes the case of an existing, successful programme as a basis for identifying a new tertiary education target group and delivery mode in another country -- commonly termed today "discovering a new niche in the market." The programme is the Massey University Master of Educational Administration degree and the potential new region is that of the states of Sabah and Sarawak in East Malaysia.

The initial thinking underlying this proposal resulted from two visits to the region by myself and the University's International Students' Manager, Mr Bruce Graham, in 1995 and 1996. The first visit had a broad focus in endeavouring to acquire a general "feel" for the market. The second occasion enabled more specific market and logistical research plus a series of orientation visits to educational organisations (schools, teachers colleges and universities) in order to gain some understanding of these contexts.

At the time, the concept was timely and with the potential for success, in the views not only of the writer and Mr Graham but also of senior staff members of the University. Subsequently, a proposal was prepared by the writer but this development did not proceed -- largely due to the restructuring of the University and the other more urgent priorities arising from the merger of the former Faculty of Education (within Massey University) with the local Palmerston North College of Education; these activities consumed people's energy and attention for the next 12-18 months. Perhaps the time is now right to reconsider the proposal: hence, the presentation of this paper.

#### **2. THE GENESIS OF THE IDEA**

Several years ago, a graduate student with a spouse and five children came to Palmerston North from East Malaysia. Although funded by a Government scholarship from the student's home country, additional costs were involved for the student -- school fees in New Zealand, for example -- while the spouse was unable to work in New Zealand and the disruption to family life was considerable. Such disruption and cost, it was readily apparent, would be lessened substantially if we could provide the programme in the student's home location.

Our visits to East Malaysia brought the realisation that there was strong interest in the Massey University MEdAdmin Programme among educational professionals with first degrees -- people who wanted to increase their qualifications, especially in leadership and management for mid-career professionals. In addition, Malaysia is currently reducing its overseas scholarship opportunities and many people have no possibility for graduate study in our field of interest.

### **3. THE MASSEY UNIVERSITY GRADUATE PROGRAMME IN EDUCATIONAL ADMINISTRATION**

The Massey University Master of Educational Administration programme has been offered since the late-1970s. Beginning in 1986, the degree (200 points) was the University's first extramural masterate from which over 300 people have graduated (many graduates now hold senior positions in New Zealand's education system). We have experience, too, with international students from developing nations. The first half of the programme is now available as a Post-Graduate Diploma in Education (endorsed in Educational Administration) after completing the first 100 points of the programme.

### **4. WHY EAST MALAYSIA?**

A number of reasons were identified as making this region both suitable and attractive for such a development:

- The region lacks the strong international competition from other (often major) universities which is currently present in the major city of Kuala Lumpur (located on the mainland peninsular).
- There are two major cities in the region -- Kota Kinabalu in Sabah and Kuching in Sarawak -- each of which has both a newly developed university and an established teachers college. Keen interest in co-operation or twinning was detected at the Universities of Malaysia in Sabah and Sarawak as well as the Gaya Teachers College (Kota Kinabalu) and Batu Lintang Teachers College (Kuching).
- There is considerable "starting" potential in each centre, with at least one dozen people in the teachers college sector alone (plus some school people) expressing a high level of interest in our programme.
- Geographically, there is easy, regular access to this region from Singapore, with daily flights to and from New Zealand.
- In the region, there is almost no competition (and very few comparable professional development opportunities) in the study of educational administration and educators of middle to senior levels of experience are seeking such professional development provisions at master's level.

- The region has perhaps the highest levels of English language competency in Malaysia amongst its educators.
- Our programme would provide a significant professional development opportunity in the region, with the possibility of future developments in offering the BEd and MEd degrees and, later, even the EdD qualification.
- In addition, we have several MEdAdmin graduates who have returned home to responsible positions in both cities and who would be acceptable as local tutors in the programme. These people also considered that the MEdAdmin Programme was relevant for educators in their region of Malaysia.
- My own links have been developed with the Ministry of Education of Malaysia and with schools, teachers colleges and the two universities.
- Finally, such a development would be consistent with Massey University's move into the provision of its teaching programmes on a wider basis beyond New Zealand and with the current burgeoning phenomenon of the globalisation of education.

## **5. WHAT MIGHT WE OFFER IN TERMS OF A PROGRAMME?**

What might Massey offer in terms of an international programme? The brief answer to this question is that we could quite readily provide (either by Semester II 1999 or the beginning of 2000):

- A customised offering which would include local teaching materials;
- A fixed range of papers (which would be most cost-efficient);
- Some papers from other colleges in the University;
- One paper taught on the campus in Palmerston North and supplemented with professional, supervised visits to local educational institutions -- so enabling a genuine international component (and perhaps a small-scale internship) to programme participants;
- A staffing base which is considerably enhanced by the merger with the former Palmerston North College of Education and which would provide a wider range of teaching and supervision interests and possibilities;
- A small network of local tutors (our recent graduates) in East Malaysia who could provide one-to-one contact and local support plus supervision of seminars and assignments.

## **6. MIXED MODE DELIVERY**

The programme would capitalise on our experience in providing graduate study by distance. Print materials would be customised (including local content where available), although international copyright issues would need to be addressed. There is only a 4-5 hour time difference between New Zealand and Malaysia, which would provide the convenience of “same day” contact by electronic media such as e-mail, telephone (including conferencing) and fax. Web-based teaching is a very real possibility, too. (Malaysia, it should be noted, is at the forefront of media and information communication (Ohmae 1998)). The intention would be to provide intensive block courses of, say, four days per paper, with Massey University teaching staff in attendance to lead this teaching. Assignments and examinations would be completed locally (with local tutor support and input being available) and sent to Palmerston North for marking and moderation.

The possible completion time of the programme is an interesting point. The current regulations provide six years for programme completion, while most New Zealand students take four years of part-time study. My assessment is that the East Malaysian students do not want to take this amount of time! They have expressed a willingness to work hard, with the aim of completing the graduate degree in *three* years of part-time study. Five semesters plus three vacation courses seems realistic with this group. In addition, an initial entry group of 10-15 people in the first year would be placed in our successful cohort system, which provides peer and staff support, and which has ensured a very low drop-out rate in the New Zealand context.

Finally, local bases are available (and have been discussed locally) with the possible partner institutions -- particularly, the University of Malaysia Sabah with its new campus in Kota Kinabalu.

## **7. TWO MAJOR ISSUES FOR CONSIDERATION AT MASSEY UNIVERSITY**

Two major issues have been responsible for the cautious response to the proposal outlined above: financial issues and the clear identification of benefits. I turn to the financial issues first.

### **7.1 Financial Issues**

Two unresolved financial issues made difficult the earlier progression of the initial proposal. The first was the issue of control and disbursement by the University of income from the off-shore programme. The second was the issue of costs to students. I treat each of these in turn.

First, I will discuss the issue of control and disbursement by the University of income monies and the potential return to the university department and/or college. Costs would include: staff travel and accommodation, facilities' rentals and the provision of services (including teaching and student support -- enrolments, assignment processing, and so on). Importantly, the programme would be expected, of course, to generate a surplus amount of money. One possible suitable model would be for the programme to

“stand-alone” as a finance centre and to purchase -- mainly from the University -- its own staffing, support and resource needs. But, as noted above, the financial arrangements would need to be sufficiently attractive at departmental level in order for support to come from that direction. Such a development as the one under discussion here, could certainly provide a reasonably substantial source of income for both the University and the department.

Second, I will discuss the issue of costs to students. Local discussion with potential students indicated that the market would bear student fees around 50-60% of current international student fees (although this discussion occurred prior to the Asian economic crisis) while living costs would be greatly below those carried by international students who travel to reside in New Zealand. These living costs would include local attendance costs plus, if implemented, one short period of residence on-campus in New Zealand. In summary, the financial attractions of the proposed development can be summed up with two simple principles: “trade is aid” by which both parties can achieve the “win-win” situation, which is so often heard in the Malaysian context.

## **7.2 The issues arising from the question, “What are the benefits?”**

What are the benefits from such a development? For potential graduate students, the answer is easy: The achievement of a well-established and well-regarded degree at much less and more manageable cost and with much less disruption to personal and professional life. For the University, a new market niche would be established with entry into the wider field of global education beyond New Zealand. A desired service would be provided, while an additional revenue stream and job developments would be likely. Nevertheless, there are some difficulties in achieving these benefits.

First, University staff members may not necessarily perceive the benefits presented above! Their anxieties centre largely around the issue of financial returns to their department and the consequent ability to best capitalise on the new source of income and activity. This issue really requires quick resolution by University authorities.

Second, some staff members will feel anxious about providing resource material which will be in tune with the Malaysian educational and societal context. This issue can be overcome. The writer found it easy to arrange orientation visits to local schools and tertiary institutions for this very purpose. Co-operation with new colleagues, and a search through local library sources, will produce new teaching resource materials. Other issues might include staff opposition to the concept of “selling” education on the international market, or the view that “It’s too hard!” However, such a development as the one outlined in this paper would definitely offer staff members exciting new opportunities for teaching, research, co-operation and consultancy. In addition, in the case of the Massey University College of Education, with the merger of recent years now completed, the concept in this paper is probably timely once again.

Overall, the potential benefits of such a development as the one presented in this paper are obviously clearly economic in nature, in the first instance. However, other possible benefits include the further development of the University's mission as a provider of education on the international stage and the academic-professional benefits which would be available both for programme staff and participants.

## **8. THE WIDER CONTEXT OF TERTIARY STUDY IN SOUTH-EAST ASIA**

Despite the current Asian economic crisis, tertiary study in New Zealand and Australia is still a popular choice for many people from this part of the world. *The Straits Times* (1998a) reported that students from Malaysia and Singapore were still signing up to study in Australia and the same is probably true for New Zealand, although on a lesser scale (*NZ Herald* 1998). A wide range of techniques are currently being applied with the intent of attracting "foreign student" enrolments both off-shore and in the universities' home locations: the now quite common twinning and co-operative arrangements; branch campuses in foreign countries (*The Star* 1998); simplified application procedures (*THES* 1998a); simplified visa procedures (*THES* 1998a); "bargain deals" such as reduced local travel and accommodation and loan schemes (*THES* 1998b); and flexible payment schemes, scholarships and loans (offered by six New Zealand universities including Massey University) (*The Straits Times* 1998b).

As noted earlier in this paper, programmes such as the mid-career, professionally-focussed but academically rigorous and well-regarded MEdAdmin degree, are still very likely to be attractive to international students -- not least because of the lesser financial and personal and professional disruption costs involved, where such programmes can be provided locally.

## **9. CONCLUSION**

This paper is written not to reactivate the earlier proposal but as a case which might illustrate the possibilities which exist for this type of development in Massey University, and to identify some important aspects which must be considered by other people with ideas for similar developments. Such aims, in fact, are consistent with the Chancellor's call, in *MU* December 1995, to improve Massey University's standing internationally and with the 1996 accord between the New Zealand and Malaysian Governments which aims to increase educational and cultural links between both countries.

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## Chapter 5

# THE INTERNATIONAL STUDENTS' OFFICE AT MASSEY UNIVERSITY: A CASE STUDY

by  
**Bruce C. Graham**

This paper attempts to outline, in general terms, the current functions of the Massey University International Students' Office (ISO). Particular focus is given to international student recruitment strategies and initiatives since the inception of the ISO in January 1994.

### 1. INTRODUCTION

Massey University has a long tradition of educating of international students, particularly through the former Agricultural and Horticultural Sciences Faculty. Indeed, the University Colombo Hall of Residence was established for students studying at Massey under the Colombo Plan. There has always been a strong and close connection between Massey and the New Zealand Ministry of Foreign Affairs & Trade. This government department has, for many years, continued to select Massey as a key training establishment for students from developing countries. Accordingly, Massey's reputation (particularly in South-East Asia, and areas of the Pacific, and Latin America) has been strengthened by many of its international Alumni, who often hold key influential positions in their home countries.

### 2. WHY UNIVERSITIES WORLDWIDE HAVE INTERNATIONAL OFFICES

Over recent years universities around the world have recognised the value of having a dedicated international focus, not just for students, but for all of the international activities of a university. Some of the more common reasons for the establishment of an international office include:

- The requirement for a university to position itself internationally as an institution with international credibility and recognition in both teaching and research.
- The commitment of a university to internationalization under its University Charter.
- The necessity for a university to provide an "International Window" for overseas enquiries on all issues.



- The need for a cohesive and co-ordinated university approach which can act as a link internally and externally in co-ordinating international activities.
- The need to co-ordinate specialized and integrated functions unique to internal and external clients.

### **3. WHY MASSEY UNIVERSITY SEEKS TO ATTRACT INTERNATIONAL STUDENTS**

Although Massey University has been an attractive study destination for a significant number of overseas and New Zealand Government-sponsored international students since its early beginnings as an Agricultural College in 1927, a full internationalization policy for the University has only been developed during the last decade. The Education Amendment Act (1990) was a turning point. This legislation allowed the New Zealand Government to open the door to private full-fee-paying students from countries all around the world. Privately sponsored students, if they had the financial resources, now had the option of studying at a New Zealand university. Massey University, like other New Zealand universities, welcomed the opportunity to enrol these students, because they enrich the cultural environment of the University and foster the promotion of international understanding and goodwill. Upon graduation, they become important Alumni, advocates and ambassadors for the University (and New Zealand); as such, they enhance the academic and research reputation of the University and assist in creating international recognition for Massey University degrees. Further, and perhaps more obviously, they greatly assist the revenue stream for the University, which has had to operate within an environment of decreased government funding (particularly during the 1990's).

### **4. ESTABLISHMENT OF THE INTERNATIONAL STUDENTS' OFFICE AT MASSEY UNIVERSITY**

The increased numbers of students from overseas being admitted to Massey University in the 1990s soon required it to develop a number of policies in respect of international students. As a result, the International Student Policy Advisory Committee (ISPAC) was established and subsequent discussions of that committee resulted in the need for the establishment of an International Students' Office (ISO) in January 1994. Day-to-day management of international student issues became the responsibility of an International Students' Office Manager; the office itself became a sub-section of the Academic Section of the University and responsible, through the Academic Registrar, to the Assistant Vice-Chancellor (Academic).

The substantial international student fee levels imply the provision of specialist dedicated services. Consequently, the ISO has adopted a mission statement which is committed to providing, at all times, a co-ordinated high quality service to prospective and enrolled international students, University staff, and other International Students' Office clients or external agencies.

It is acknowledged that the ISO is often the first positive experience and point of contact for an international student who, upon admission, lacks network support. Moreover, the ISO is in a position to give particular attention to support issues (for example accommodation, placement, and so on) and due consideration to matters requiring a high level of cultural sensitivity.

## **5. ISO FUNCTIONS AND RELATIONSHIPS**

The existing structure of the ISO currently provides for a dedicated, specialized and cohesive approach for all international activities. The ISO currently employs six full-time staff who provide a full range of services to all enrolled and prospective international students. This includes assisting students from the time of enquiry, or admission, through to graduation and their status as University Alumni. Three part-time temporary staff are also employed to assist with the high volume of enquiries (approximately 10,000 per annum) and admissions, which have increased significantly over recent years. The establishment of a second campus at Albany (in Auckland in 1993) has proved popular with international students, who often tend to prefer to be located in, or near, a large international city or metropolitan area. In July 1999 Massey gained a third campus at Wellington, following a merger with the former Wellington Polytechnic.

Specialist services provided by the ISO include liaison, recruitment, general enquiries, pre-admission assessment and selection, registration and enrolment, academic and cultural support, and academic and financial administration support for students and their families sponsored by the New Zealand Ministry of Foreign Affairs & Trade.

The ISO also has a liaison function with both internal and external clients. Inside the University, relationships have been established with Colleges/Institutes/Schools, the Massey University English Language Centre, the Student Learning Support Centre, Residential & Catering Services, Corporate Communications, the Recreation Centre, the Students Association and other members of the Administrative Divisions of the University. Externally, clients or agencies include government departments (such as the Ministry of Foreign Affairs & Trade, the New Zealand Immigration Service, Trade New Zealand, and the Ministry of Education), the International Unit of the New Zealand Vice-Chancellors' Committee, other New Zealand and overseas University International Offices and private companies (including Education New Zealand, medical insurers, education agents and private and public off-shore institutions).

## **6. NEW ZEALAND GOVERNMENT-SPONSORED STUDENTS**

Massey University has always had government-sponsored students as a significant proportion of its international enrolments. By far the largest sponsor is the New Zealand Ministry of Foreign Affairs & Trade (MFAT), which currently provides in excess of \$2.6 million annually in international tuition fees to the University. This sponsorship is part of the New Zealand Official Development Assistance (NZODA) fund managed by the Ministry on behalf of the Government. It is interesting to note

that by the end of the placement round for the 1999 academic year, a total of 1934 students will be studying in New Zealand under the Ministry's assistance. Some further details are presented in Table 1, below.

**Table 1: New Zealand Overseas Aid Schemes**

Aid scheme	No. of Students
Study Award Bilateral country programmes (Pacific and Asia )	605
Postgraduate Scholarship Scheme	229
Aotearoa Scholarship Scheme (South Pacific countries)	718
Commonwealth Scholarships Scheme	35
Dependent's Scholarships (Primary, Secondary, Tertiary level)	347

In addition, NZODA supports, through bilateral programmes, 300 students from South Pacific countries studying at a range of South Pacific educational institutions.

## 7. A SUCCESSFUL MODEL

There are many ways to evaluate the performance of administrative and support units within a university and perhaps the most common method is to review achieved growth rates. Since its inception in 1994 the Massey University ISO has been successful in its international student recruitment and retention activities, as shown in the enrolment figures in Table 2.

This performance equates to a 123% increase in student numbers since the establishment of the ISO in 1994. In excess of 65 countries are currently represented by enrolments at Massey University campuses.

**Table 2: International Student Enrolments at Massey University**

Year	International Student Enrolments
1991	378
1992	367
1993	398
1994	511
1995	655
1996	822
1997	929
1998	888

Note: These figures differ from those presented in Table 7 in Chapter 1 above, because they are based on a different reporting date. The figures in Table 2, presented immediately above, show the enrolments over the full calendar year, whereas the figures shown in Chapter 1, from *Tertiary Education Statistics*, are based on enrolments as at 31 July of every year.

## **8. INTERNATIONAL STUDENT RECRUITMENT AND MARKETING STRATEGIES**

Prior to 1994 international recruitment was spasmodic and not part of an overall University recruitment plan or strategy. Today however, detailed business and marketing plans form the basis of strategies adopted by the ISO. Target countries have all been classified in terms of primary, secondary and developing markets; each market is unique and requires a different approach. Some, for example, are mainly undergraduate, while others are predominantly post-graduate or specialist English language markets.

A number of external factors, both in New Zealand and within target countries, have markedly affected the recruitment strategies and tactics employed by both Massey and other New Zealand universities. The well-documented Asian economic crisis has impacted on traditional recruitment markets, particularly Thailand, Korea, and Indonesia. However, what should be noted, and is perhaps less well-understood, are the effects of in-country government policy changes. In Malaysia, for example, traditionally the largest recruitment market for undergraduate students in Asia, the effect of the elimination of off-shore tuition fee tax relief for parents, and the cancellation of nearly all government scholarships to study abroad, has been significant in dramatically slowing the number of students going abroad.

Overall, the instability of the Asian currencies, along with the associated impact of target-country government policies, has led to a weakening of the institutional linkages which exist between New Zealand universities and Asian markets. However, the emergence of new recruitment markets, such as China and India, has helped offset the decline in Asian student enrolments.

New Zealand's progressive attitude, to China in particular, has resulted in a liberalization of student permit and visa restrictions for students. Financial support from the New Zealand Government (through Trade New Zealand) to the education sector has seen a repositioning of the generic promotion of New Zealand education and the emergence of education export networks (which in some cases are supported by an institution-funded organization called Education New Zealand (ENZ)).

As more and more universities internationally seek to attract more students, creative and imaginative marketing strategies and tactics are being employed by institutions in an increasingly competitive international marketing environment. Traditional generic education fairs are being replaced by targeted seminars using sophisticated technologies, as institutions try to diversify away from the Asian market.

## **9. THE INTERNATIONAL UNIT OF THE NEW ZEALAND VICE-CHANCELLORS' COMMITTEE**

It was agreed in 1997 that an International Unit be formed within the New Zealand Vice Chancellors' Committee to co-ordinate generic marketing of university education in New Zealand. This unit, which is jointly funded by all seven universities, co-ordinates a range of international activities as it seeks to position New Zealand university academic programmes and research capability internationally. In its first year of operation a number of directories and profiles were produced along with a "Code of Practice for the Provision of Education Programmes and Services for International Students by New Zealand Universities." This International Unit is an important part of the marketing effort of the combined universities.

## **10. A NEW STRUCTURE AT MASSEY**

In 1999 Massey decided to restructure its internal management and administration functions to take account of what is now a multi-campus environment at the university. The appointment of a Principal (Extramural and International) and the establishment of a specialized International Liaison & Recruitment Unit, confirms the University's progress towards its commitment to internationalize its three campuses. International student support will be a responsibility of individual Campus Principals, while liaison and recruitment will be a multi-campus function. These anticipated new developments, along with further international institutional partnerships, will see the university strengthen its strategic position internationally in the next millennium.

## **11. CONCLUSION**

Although Massey University has, for many decades, acted as a study and research destination for significant numbers of international students, particularly from developing countries, it has only been since the early 1990's that it has given more focus to an internationalisation strategy. The Education Amendment Act (1990) has given impetus to tertiary institutions to actively promote programmes for privately-sponsored international students and for the development of institutional linkages abroad. The establishment of the International Students' Office, as a "one-stop service centre", has been a very successful development. This chapter has attempted to trace some of the main international student developments over the past six years and has made mention of a proposed restructure in line with the repositioning of the university internationally and a management structure which accommodates a multi-campus environment. However, little has been said about the significant changes which have occurred both nationally and internationally with regard to international education. Clearly, recent New Zealand Government decisions about funding the promotion of generic international education, and the respective roles of Trade New Zealand and Education New Zealand, will influence the direction and nature of international education programmes at Massey University and other New Zealand tertiary institutions in the years to come.

## Chapter 6

### A NOTE ON MERCANTILISM

by  
James E. Alvey

It is frequently said (by agencies such as the New Zealand Market Development Board, see Chapter 1 above; and others) that the export of education services is *good* because it brings foreign exchange into New Zealand. As stated in Chapter 1 above, the total New Zealand education export industry has been estimated to be worth perhaps \$540 million and the tertiary education component (including language courses) of that total is some \$400 million. In addition, it is often held that incoming foreign exchange should be greater than outgoing foreign exchange, or that exports *should* be greater than imports. For example, in his chapter, Tom Prebble takes as his starting point the view that “New Zealand is a trading nation reliant on its ability to export more than it imports.” In an earlier version of Chapter 1, there were hints of a similar view.

Dr. Michael Carter, of Canterbury University, criticized an earlier version of Chapter 1 on the basis that it adopted a discredited economic theory called mercantilism.<sup>14</sup> He stated: “Indeed, it leaves me just a little uneasy, as the paper has a *faintly mercantilist air*.” And after citing some passages that provided some evidence for his interpretation of the paper, he concluded that “I thought [that such views] had been banished from economics for some time.”

What is meant by mercantilism? Mercantilism is the name given by Adam Smith to the prevailing economic theory of the 1700s, that had been promoted by merchants for centuries, that implicitly assumed that the quantity of gold (money) in a country was identical to the wealth of the country. As the goal of economics was taken to be increasing the wealth of the country in which one lived, the means to that end was the increase of the amount of gold in the country. Merchants went on to argue that exports were responsible a positive inflow of gold and *should* be encouraged, whereas imports represented an outflow of gold and *should* be discouraged. In short, mercantilism was a theory that supported the view that the aim of any country was to have a surplus of exports over imports. Consequently, all economic policy should aim at this result. Mercantilists were very inventive in developing a wide array of policies that directly, or indirectly, aimed at increasing exports or reducing imports.

The notion that exports ought to be greater than imports originated in the 1500s and became the orthodoxy throughout Europe. With the breakdown of the gold standard

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<sup>14</sup> On mercantilism, see for example J. Viner “Economic Thought: Mercantilist Thought.” In *International Encyclopedia of the Social Sciences*. 18 vols., 4:435-43. Ed. D. Sills. Macmillan and the Free Press, 1968.

after World War II, the mercantilist objective of securing a positive inflow of gold is no longer relevant. On the other hand, the goal of having exports greater than imports is very much alive. We can call this view neo-mercantilism.

Mainstream economic theory shows that a neo-mercantilist policy is not sustainable in the long term because prices will adjust and the economy will become uncompetitive in international markets. In the long run exports will decline. Consequently, economists generally argue that intervention along mercantilist (or neo-mercantilist) lines is self-defeating: free trade is the answer. I do not wish to enter into any dispute on the matter of economic theory. On the other hand, there are a number of practical matters that I will comment upon.

First, the foreign exchange effects are important to the education services industry as a sign to government of its importance to the economy. This was evident at the NZEIL Conference that I attended in 1998 and in publications like *A Study of the ELICOS Industry in Australia, 1996* (ELICOS, 1997). Second, a number of governments also implicitly accept a neo-mercantilist view on education exports and indeed on a whole range of other goods and services. The Australian government has spent large amounts of money promoting education exports. The New Zealand government acknowledges the importance of foreign exchange effects but has been more frugal in supporting the development of the education export industry. Finally, one might accept the importance of foreign exchange effects from education on the pragmatic ground that it may be a way of overcoming a structural problem in the New Zealand economy. The Current Account of the New Zealand Balance of Payments has been in deficit almost every year for two decades; in lay terms, this means that New Zealand as a whole has been living beyond its means. Much of the deficit is due to “invisibles” such as services. If education exports are successful in bringing large amounts of foreign exchange into New Zealand, progress will have been made in overcoming the deficit on the invisible part of the accounts. Hence, foreign exchange effects are important and should feature in any economic analysis of the industry.

## Chapter Seven

### THE INTERNATIONAL SALE OF TERTIARY EDUCATION: STRATEGIC ISSUES

by

**James E. Alvey, Stuart Birks and Gary Buurman**

The modern New Zealand university is an enterprise that needs strategic management. It has been estimated that international degree students currently provide about \$85 million per year to tertiary education institutions and that tertiary education exports result in some \$400 million expenditure overall. In this chapter, we address some of the issues that were highlighted at a Forum on the International Sale of Tertiary Education Services held at Massey University in October 1998. Forum participants indicated that significant opportunities were missed because of poor incentives provided within universities and elsewhere. The international market is also changing rapidly, with tertiary institutions in other countries facing similar problems and attempting imaginative solutions.

#### 1. INTRODUCTION

The legislative requirement for universities is that they are characterised by "a wide diversity of teaching and research, especially at the higher level, that maintains, advances, disseminates, and assists the application of, knowledge, develops intellectual independence, and promotes community learning" (*Education Act 1989 S162 (4)(b)(iii)*). Colleges of Education engage in teaching and research related to various levels of teaching; and polytechnics provide a wide range of continuing education and vocational training (*Education Act 1989 S162 (4)(b)(i and ii)*). The research function therefore applies to universities and colleges of education, but not to polytechnics (except for degrees, see III.1). It is in this context that we should view the international sale of tertiary education.

This paper arose from a Forum on the International Sale of Tertiary Education Services, held under the auspices of the Centre for Public Policy Evaluation of Massey University, in Palmerston North, New Zealand, on 15 October, 1998. Five papers were presented (by Prebble; Edwards; Graham; Buurman; and Alvey, Duhs, and Duhs – and all of them appear above) and discussion followed. It is clear that the tertiary education environment is very dynamic, and significant changes can be anticipated in the near future. A number of major issues facing universities were highlighted in the papers and in the discussion. These issues included: i) whether the international dimension deserved special treatment; ii) problems of pricing; and iii) internal incentive structures. These issues are developed further below.



## 2. THE ENVIRONMENT

### 2.1 The Situation to Date

Until the end of the 1980s, New Zealand's involvement in international education services was linked to foreign policy and its foreign aid programme (see NZMDB 1987, 11). While international students paid either no fee or the same heavily subsidized fee as domestic students, strict quotas were applied to limit their enrolment. In 1988 the government decided to shift from an "aid" to a "trade" approach to international students. The quotas on international students were lifted but fees rose from below \$500 per year to a full-cost fee of around \$8,000 per year for arts, commerce, humanities and law degrees, and are currently about \$10-12,000 for a BA or BE. Applied subjects such as agriculture, computer science, engineering, and science would attract substantially higher fees. New Zealand had decided to enter into the market for international education services. In 1989 these changes were implemented via the Education Amendment Act, including the requirement that tertiary institutions charge international students fees that cover the full cost of delivery.

Section 20.4 of the Education Amendment Act 1989 states:

- (4) Subject to subsection (3) of this section, no foreign student shall be or continue to be enrolled in any subject, course, or programme at a tertiary institution unless there have been paid to the council---
- (a) An amount fixed by the council (having regard to any guidelines the Secretary has given it) that is not less than the sum of---
- (i) The council's best estimate of the cost to the council (including the appropriate proportion of the council's administrative and other general costs) of providing tuition in the subject, course, or programme for 1 student; and
- (ii) An amount that is in the council's opinion an appropriate reflection of the use made by 1 student receiving tuition in the subject, course, or programme of the council's capital facilities; and
- (b) All fees (if any) prescribed by the council.

What happened as a result? The enrolment of international students increased substantially and tertiary institutions now found that a major revenue source had emerged. The number of fee-paying international students in tertiary education in New Zealand increased from just under 2,000 to about 6,200 in the period 1992 to 1997, as shown in Table 1. Fees from international degree students were about \$85 million in 1997. It has been estimated that *tertiary* education exports, including intensive English language courses, were worth about \$400 million in foreign exchange in 1997 (see Chapter one, above). Of this, \$144 million is attributable to English language courses. The 1998 enrolment figures are generally down, mainly because of the Asian economic crisis.

Of the regular degree students in 1998, about 71 per cent of international students attending New Zealand tertiary institutions came from Asia. In addition, about 15 per cent of international students attending tertiary institutions were from the Pacific

Islands. Data on international university enrolments broken down by source are not available for the seven universities for 1998. The 1997 figures show international university students come predominantly from Asia and the Pacific Islands; this fits the pattern of the general international tertiary enrolments mentioned above. A striking feature of the source of students was the concentration of students from Malaysia. The dominance of Malaysia as a source country declined somewhat in 1997 and 1998, and further sharp declines are anticipated due to the Malaysian government goal of achieving self-sufficiency in tertiary education. Nevertheless, nearly 30 per cent of all international tertiary students and over 40 per cent of all international Asian tertiary students came from Malaysia in 1998. On the face of it, and especially in the light of recent developments, this would seem to be an imprudent dependence on a single source.

**Table 1: All International and Full-Fee-paying International Students in all Tertiary Institutions**

Year	All International Students	All Full-Fee-paying International Students	Percentage fee-paying: Total
1989	3604	886	24.58
1990	3471	603	17.37
1991	3057	879	28.75
1992	4835	1963	40.60
1993	4911	2131	43.39
1994	5567	2935	52.72
1995	6742	4101	60.83
1996	6034	4901	81.22
1997	7587	6206	81.80
1998	7221	5766	79.85

Sources: *Tertiary Education Statistics* various years and Department of Education.

Note that grand-parenting or transition of overseas students enrolled prior to 1989 to N.Z. student status may have affected the numbers of full-fee-paying students prior to 1992.

In August 1998 a Trust Deed was signed to establish a new industry organisation called *Education New Zealand* (see their World Wide Web Site). As Logan (1998) points out, for the first time all of the international education providers engaged in the education and training of international students will be represented by a single organisation. Logan adds that:

Education New Zealand is empowered to negotiate on behalf of providers, the arrangements to promote New Zealand as an education destination for international students. It will facilitate the creation and maintenance of a business plan as the basis for industry co-operation on national promotion.... It is planned that Education New Zealand will be operational from January 1999, with its priorities and functions set by a new industry plan.

This is a major institutional change, but much is left for institutions to manage through their own international student offices (see Chapter 5 above).

## **2.2 Current Delivery Options**

Tysome notes that “As cash constraints in some areas have curtailed students’ globe-trotting ambitions, a growing part of the [international education] market is about taking education to the student” (1999, 8). As the newer delivery modes are growing rapidly, we should investigate the range of options available.

Prebble (see Chapter Two above) has provided a useful summary of five delivery modes of international education. i) One option is direct sale of course materials or programmes to off-shore educational institutions. There are actually few opportunities for such sales and the likely returns to the institution are not likely to be high. ii) There are partnership possibilities for the delivery of teaching courses off-shore. In these twinning arrangements there is input from the New Zealand institution and the overseas host institution. This may be a fruitful area for New Zealand institutions, especially in the South-East Asian region. A major cost in this case would be the high demands placed on New Zealand staff who would be required to travel to the host institution and provide teaching (in intensive mode) and assessment. iii) Institutions can also enter into consortia of educational providers. This mode requires educational providers to set up credit arrangements between the contracting parties to facilitate a flow of students amongst them. The scope for such arrangements is not yet clear but it reduces the discretion and autonomy of the members of the consortium. iv) A further option is the off-shore enrolment in New Zealand distance education programmes. This mode includes correspondence education, teleconferencing, and Internet versions. While there is a strong market for these types of education services, there is considerable difficulty and expense in marketing one’s programmes. v) Finally, there is the possibility of participation in virtual university projects. This is an option that has only recently emerged and occurs where an institution joins with other institutions and corporations to establish a large, web-based institution which operates largely independently from the member institutions. While there is a potentially large market for such projects, there would be a loss of institutional autonomy. There are also high capital costs with uncertain returns in this mode.

Should participation in the international education market be guided by individual educators within an institution, by the central administration, or by groups of institutions? There are large financial costs in several of the options mentioned above. There are also significant risks of wastage of resources, and, as Prebble points out, reputation in the international market is hard to regain if lost. Consequently, it has been suggested that a corporate approach is required: the administration may be required to select the appropriate mix of programmes, media, and delivery options. But these measures run against the long-established pattern of educators individually making decisions on a whole range of matters.

## 2.3 Strategies of the Players

In addition to using innovative delivery modes, players in a competitive environment may operate on an *ad hoc* basis to differentiate their product. With imperfect information, poor planning, or short-term objectives, the result can be problematic. In Britain, many universities:

... are offering "bargain basement" one-year deals that could lure students who may find they cannot continue their studies into a second year. ... Free bus passes, cheap accommodation, loans and "meet and greet" services are among special offers being touted by institutions in advertisements and on web sites. (Tysome 1998a, 36)

In Australia, "Some universities have complained that students they have recruited have been lured elsewhere through promises of lower tuition fees and laxer academic and performance requirements" (Maslen 1998, 9).

There has also been an increase in the number and type of institutions offering tertiary education: "Universities have lost their monopoly on teaching and research, with global corporations now running their own higher education programmes and buying in expertise from moonlighting professors, according to leaders of the Association of European Universities (CRE)" (Tysome 1998b, 1).

Bourke (1997) and Mortimer (1997) found that crucial factors determining overseas students' choice of institution are networks and information. Have students from their country studied there in the past, or do they know students there now? Is there special support for overseas students at the institution? On application, is the relevant information provided rapidly and in a clearly understandable form? As Graham pointed out in Chapter 5, many of these things are addressed by international student offices.

While it may be desirable to have competition at some levels, a broader strategic approach may also be significant, especially with government policy and where there are rapid changes and complex interdependencies. Numerous moves can be observed.

Australia is simplifying student visa applications from 1999 and providing extra funding for marketing of international education. Maslen (1998, 9) writes:

The Australian Vice-chancellors' Committee [AVCC] welcomed the revised [visa] regulations but attacked the government for not being "sufficiently strategic" in its approach. ...The AVCC executive director Stuart Hamilton said the positive changes included the retention of student work rights, which were an essential marketing tool. "But it is frustrating [that] the government has not listened to our arguments that the level of visa fees and charges are a disincentive to expansion in the industry," he added. ...The government needed to promote closer regional educational links, support staff and student exchanges, and offer more scholarships for needy new students.

... In a related decision, education minister David Kemp announced the government would spend \$21 million over the next four years to support the marketing and promotion of Australian education and training services through its marketing arm, Australian Education International.

The UK has also moved to simplify and relax admissions procedures, noting in particular that deadlines for applications may be too early for some countries (Swain 1998, 1).

France has also relaxed its requirements, making admission into the country easier for researchers and allowing students to take paid employment to a greater extent than previously (Marshall 1998, 13).

In Europe the challenge to universities has also led to calls for strategic responses on the grounds that too little is being done at present. Suggestions include "strategic alliances" with stakeholders so that universities can respond more rapidly to changing professional training needs. Tysome (1998b, 1) mentions a report on these problems:

Although universities are expected to play an important role in technology transfer and as a magnet for inward investment, institutions often have no coherent strategy for turning this into a reality. ...The report says: "It may also be questioned whether prevailing university structures and leadership roles are adequate for the type of networking now being demanded of higher education institutions."

Strategic moves in the UK include assessing institutions and giving a "kite-mark", or mark of quality, for courses of a suitable standard offered overseas. The issue arose after several instances of dubious practices with international joint ventures. In addition, the British Council already assists institutions with the establishment and marketing of distance education courses abroad (Tysome 1998c, 67). It is also suggested that the scale and cost of today's universities determines that state funding is vital, and that, "their intimate relationship with knowledge-based industries means that it is no longer possible or desirable to separate commerce from learning" (Editorial, THES 1998, 14).

### **3. THE STRATEGIC FRAMEWORK**

#### **3.1 Context**

It is important to view the international sale of tertiary education in the wider context of the general objectives of tertiary institutions. These institutions are concerned with teaching and research. Funding for these institutions varies in the way it recognises these two activities. Some funding is provided for specific research, as with contestable sources such as the Foundation for Research, Science and Technology (FoRST), or with specific research contracts from public or private bodies. Other funding is based on student numbers, and hence directly related to teaching. This latter can also include a component to cover unspecified research. One requirement of the Education Act is that

a degree must be taught mainly by people engaged in research (S 254 (3)(a) and (b)). The White Paper, *Tertiary Education in New Zealand* (1998), advocates a shift of \$80 million of the student-number-based research funding into a contestable pool. This indicates that there is not a clear and consistent division between the production of teaching and research outputs. Therefore, there are difficulties specifying which costs relate to teaching and which to research. This has associated pricing implications.

With the funding environment becoming more competitive, institutions will have to focus more closely on the amount of funding they obtain for both research and teaching. Competition for students, domestic and overseas, is not straightforward. Markets may not be clearly defined. Currently a distinction is drawn between international and domestic students. This may be appropriate as there are differences in funding sources and various regulations. Domestic students are funded through the fees they pay and a government subsidy to tertiary institutions. There is no intended government subsidy for full-cost-recovery overseas students (although cross-subsidization could occur in either direction if costs are incorrectly calculated when setting fees).

Fees for individual papers do not seem to represent the actual costs of those papers. Instead, they seem to be based on a rule of thumb. For example, for international students at Massey University in 1999 the following papers all have the same fee of \$1312.50: Introductory Business Communication; Introductory German Language II; and Greek Art (2<sup>nd</sup> year).

It is not clear that institutions should have a preference for one type of student over another if the total funding per student coming to an institution is the same for all types or reflect cost differences accurately. The concept of full-cost-recovery for international students suggests that this is the case. Where costs are the same, government policy favouring certain types of students should take effect through differences in the share of costs born directly by those students, not by the total payment to the institution.

Strategically, it is only appropriate to single out international students if they have special characteristics. It may be that domestic and international students have different backgrounds in language, previous education, and so on. They may want different qualifications. There may be different marketing strategies needed in order to make contact. Tertiary institutions are operating in an environment partly specified by governments. There could be policies on numbers, entry permits, fluency in language, or recognition of qualifications in different countries, for example. These may differ from country to country, so it may not be appropriate to consider international students as one group anyway.

In summary, we cannot easily separate teaching and research for costing and pricing policy, and it is not clear that we should view students as being in two groups, domestic and international.

### 3.2 Pricing Issues

There are a number of basic issues in the pricing of tertiary education for overseas and domestic students.

We must distinguish between the amount of revenue that the institution receives for each student (overall receipts per student including government contributions, for example) and the fee paid by each student (direct charge to the student). This section concentrates on the fee paid by each student, while keeping revenue considerations for the institution in mind. First, we outline the rationale for current thinking.

It might be tempting for the institution to charge the same fees for domestic and overseas students. This would lessen administration problems and be non-discriminatory for the students themselves. Also with the emphasis on user charges, there is a view that domestic fees should be raised in the direction of full costs.

Notwithstanding what has been said above, a case for lower domestic fees due to market failure (see Haveman 1976, 34-6) can be made with the help of the model of supply and demand. Quantities of tertiary education could be allocated by market forces. On the demand side, individuals in the private sector would be willing to pay for education because of higher expected future earnings which could arise from actual acquired skills, or screening, or other factors. On the supply side, profit maximizing private institutions would offer higher quantities of education at higher prices. The result would not be ideal, however. The equilibrium quantity would be less than the efficient amount of education for society due to an undesirable distribution of income or wealth, or due to market failures. A major market failure is the presence of externalities. In the case of education, extra (spillover) benefits are conferred on society which are additional to the benefits that accrue to an individual. The policy suggested by the model is to increase the quantity of education by providing a subsidy. This means a fee for domestic students that is less than full cost should be charged. Note that the analysis stops short of providing tertiary education at zero cost to domestic students, since there is a private benefit to the consumer of education. The model suggests a payment from both students and government.

The situation changes in the case of the international sale of tertiary education. Most foreign students, upon completion of their degree, will live and work outside of the country providing the education. The country of origin then receives the bulk of the spillover benefits. Suggested possible benefits to the provider-country include: trade links; diplomatic ties; and cultural awareness. Unless such benefits are significant, a small or nil subsidy from the provider-country is appropriate. Also, since overseas taxpayers do not generally contribute, low fees can be seen as a cross-subsidy from the provider-taxpayer to the overseas taxpayer. This means that there is a case for different pricing strategies for domestic and overseas students. A case could also be made for governments to subsidize their own students studying overseas due to external benefits received.

The case for different pricing strategies derives from taking the viewpoint of the economy as a whole, but this may not apply for an individual institution (which is likely to have its own objectives). If revenue is a major objective, there may be upward pressure on domestic fees.

From an economic perspective, there are a number of other issues that should be expressly considered in relation to efficient pricing of international education. These include:

1. It is still unclear whether New Zealand government policy is recommending prices to international students be set at average or marginal cost, even though full-cost pricing has been legislated. Early policy statements seemed to suggest average cost; later, marginal cost is at least implied (see Chapter One, above). Efficient private sector pricing in economics means that price is set equal to marginal cost. For society as a whole, efficient pricing would equate the marginal social benefit of a student to the marginal social cost of providing education. The relationship between average and marginal cost depends, to a large extent, upon the degree of excess capacity in tertiary institutions and would tend to be course-specific. Given an 'uncrowded' degree program that is already in place for domestic students, the extra (marginal) cost of admitting an international student is low. Conversely, we might find high marginal costs in 'popular' degrees like accounting and engineering. Further complications arise in identifying long-run marginal costs, and where natural monopoly characteristics (diminishing average costs) apply, marginal cost pricing would result in losses being incurred.
2. Price affects the demand for tertiary education from overseas students. In the long-term, fee levels are likely to be a highly significant factor in a competitive environment (Treasury 1987, 260) and exchange rate changes will affect fee levels. The *Times Higher Education Supplement* (1999, 3) reported research findings that, "a university's reputation for scholarship is less important to overseas students than the cost of tuition and its range of courses." Other factors (accommodation, travel fees, perceived quality, and so on) also influence demand. A single pricing policy throughout New Zealand would reduce the number of competitors each institution faces through price competition. This latter approach could be a consideration for Education New Zealand.
3. Non-price competition may also occur. This can be observed in the recent increase in advertising by tertiary institutions in the market for domestic students. The effectiveness of this strategy would depend on the sensitivity of students to the perceived characteristics of the various institutions, their other sources of information, and the potential for the market overall to be expanded. It is by no means guaranteed that such competition will result in net gains to the institutions overall.



4. Should tertiary institutions be charging a fee per paper, a fee for each year of study for a specific degree or the same fee for each paper from the institution? The smaller the pricing unit, the closer we can get to efficient pricing, but costs are involved in gathering the specific data on course provision.

Let us summarise some of the questions that are important in the pricing policy decision. While we would expect that a different price should be charged for overseas students, should institutions price at full- (average or marginal) costs, or should there be some other (government) contribution? What pricing structure is used by competitors? Do we require a single pricing structure for all New Zealand tertiary institutions, if all are offering the same thing? It is also important to consider the exact unit (degree, paper, and so on) that is being priced. Recourse to cost-benefit analysis in this area will help to resolve these questions (see Johnson et. al. 1997, 44-54).

### **3.3 Incentives**

There are also general issues involving pricing that are important at the level of the individual institution which affect the allocation of overseas students. In this section we are mainly concerned with incentives.

In post-1984 New Zealand, a change in the philosophy of economic management adopted by successive governments has involved freeing up the economy from regulation and massive restructuring. This meant that the education sector is more able to take advantage of opportunities in international markets. Nevertheless, internal blockages to market forces in education exporting institutions can (at least partially) offset these new opportunities. Structures long in place, plus resistance to change, can restrict the available supply of places to foreign students. For example, academic tenure makes it difficult to reduce staff in subjects where demand has fallen off, and trade unions for academic staff resist different salary scales in different subject areas. These structures can cause cost disadvantages that could harm New Zealand's competitive position. A particular course might be crowded with no places for overseas students because it is largely publicly funded, and the extra expense of providing additional places might not be recouped by a department. Thus there are requirements for resources to be more mobile within universities, if a strategy to attract overseas students is mounted. Further, if staff promotion criteria are heavily weighted towards research, there may be little incentive for individual staff members to support the international teaching strategy. While there may be resistance to promotion based on teaching ability, teaching of an acceptable standard could be a specified requirement, thus introducing a disincentive for bad teaching.

Even though the types of impediments mentioned above cannot be completely removed, much can be accomplished in the areas of funding and incentives. For example, there has been a move away from tenured academic positions to appointments on fixed-term contracts (commonly of one or three years). This is intended to give greater flexibility to the institution, but there may be other less desirable side-effects.

There have been changes in incentive structures for research also. Recent changes mean that individual staff are less likely to benefit from funding that they attract, and so are less likely to pursue these funds. The trend towards making research funding contestable further increases the costs of obtaining such funds and affects the type of research undertaken.

In Chapter Four Edwards presented, as a case study, a potential opportunity for Massey University to mount a course in education in Malaysia. The course was to be taught extramurally with staff visits and block mode lectures. Much of the infrastructure was already in place. Nevertheless, a key problem was eliciting support from departmental staff. There was little financial incentive and an increased workload, in exchange for the possibility of travel. Academic staff place different values on non-monetary incentives. For example, some might rank travel above increased research time, but almost all would respond to monetary payment or promotion. Hence, in terms of a strategy to increase the sale of tertiary education, the proper hierarchy of incentives is important. Not only must an institution have an incentive to pursue this strategy, but departments and individuals should be rewarded for mounting programmes and new initiatives.

## **4. DEFINING THE STRATEGIC PROBLEMS**

### **4.1 Is International Tertiary Education a Special Case?**

Are there similarities among international students, and are they different from domestic students? This is an aggregation problem. Is there a case for focusing specifically on international students? If so, dimensions would include: courses of study; countries of origin; background skills; cultural factors; external benefits to provider-countries; any general differences in costs and benefits to individuals, institutions and countries; and links to research. Also, should institutions be co-operating in their international marketing efforts, and are government strategies required (see section 2.3 above)? Alternatively, or in addition, disaggregation by delivery mode may be more practical, especially given the speed of change in this area (see section 2.2 above).

### **4.2 What are Appropriate Pricing Rules?**

Fees set according to an assessment of average cost are likely to be inefficient. It can be difficult to calculate more appropriate prices, however. Problems include the identification of marginal costs which vary between the long- and short-run, or where costs are shared over courses or over research and teaching. Costs may vary by student or student type. What share of contributions should be provided by relevant governments? There are also costs involved in more complicated pricing structures; consequently, rule-of-thumb approaches may be preferable.

### **4.3 What Internal Incentive Structures do Institutions Need?**

If institutions are to achieve their chosen objectives, it is necessary for them to have internal structures which are consistent with individuals making the required contributions. Appointment, pay, awards, and promotion criteria, as well as work conditions and management structures must be suitable. This may not be the case at present, resulting in tertiary institutions being inflexible in the face of changing market conditions.

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