

NAVIGATING CHOPPY SEAS: IELTS AS A SUPPORT FOR SUCCESS IN HIGHER EDUCATION

Lois Bellingham
Faculty of Humanities
UNITEC Institute of Technology

He moana pukepuke e ekengia e te waka
A choppy sea can be navigated

International students arrive in New Zealand with diverse motivations and abilities, and enriched by varied life experiences, but they have in common the aim to enter a culturally different educational environment. Success for them is measured largely in academic terms: they have risked a lot in the venture; the journey is often rough and guiding lights few and far between. Tertiary institutions which go into partnership with these students have a responsibility to pilot them through the harbour entrance made choppy by undercurrents and cross winds. As hosts, we must provide the best instruments, the clearest maps, the appropriate channel for a smooth entry if we are to support their adjustment to their chosen educational context and to work towards ensuring the level of their achievement is directly related to their understanding and competence in the knowledge, capacities and commitments in the particular content domains, rather than being the product of cultural, language and systems barriers.

One route to take as responsible educators is clarification of the linguistic and cultural demands of courses, raising of faculty awareness of barriers inherent in their delivery, and clear diagnosis of students' proficiency in English prior to entry. Although this study focuses on the last, it also reveals that other undercurrents impact on progress. Like the wind, the language proficiency of students is, by its very nature, a high profile factor, but that should not unduly sway educators as to its significance. The tide, the navigational equipment, the individual characteristics of each vessel and the extent of pilot support all combine to ensure a choppy sea can be navigated. An effective diagnostic language test can be one of the navigation lights that tertiary institutions utilise.

This paper reports on a pilot study exploring the predictive validity of a test of proficiency in English for international students whose first language is not English, in a New Zealand tertiary institution. The International English Language Testing System (IELTS) results are, with increasing frequency, mentioned as one of the possible pre-entry language requirements for applicants from overseas seeking higher education in New Zealand.

With the advent of IELTS in New Zealand, it is important to test its usefulness for our context before it becomes entrenched. By providing a language profile across all four macro-skills (reading, writing, listening, speaking), the test gives students and their advisors a fuller picture from which to make decisions. While it is apparent that language needs and demands are a significant problem, it is also likely, or even inevitable, that a whole raft of other factors are at work for the individuals involved. IELTS may be an instrument which could

bring reliable and valid language assessment to illuminate a confused situation so that appropriate channels to academic qualifications can be negotiated.

LITERATURE REVIEW

A survey of the literature indicates that a strong direct relationship between language proficiency and academic achievement has not been established. Davies (1988) cites a study using ELTS, the predecessor of IELTS, to argue that "all language measurement involves uncertainty" (p. 32), and that the usual level of prediction is in the region of 0.3. Apart from not being able to adequately identify and measure all the language abilities that are relevant, there remains the tortuous task of analysing the interrelationships of the contextual and psychological variables and the extent of their influence on the performance being predicted.

However, Alderson (1988) believes that given a common goal - tertiary study in English-medium in a particular cultural milieu - a predictive test should be possible. He points out that the target situations are in fact heterogeneous: students go to programmes in different subjects at different levels in different cultures', and so a language test loses a degree of its predictive utility. A similar conclusion is reached by Graham (1987). Her review of academic prediction studies in the United States of America leads to the notion that there may be for each institution a minimum level below which lack of sufficient proficiency in English contributes significantly to lack of academic success. This signals an aspect of the issue which this study has exploited. By selecting as the subjects students entering just one academic programme, the impact of variance arising from the target academic environment has been limited.

Burns (1991), Fiocco (1990) and Ginsburg (1992) have all identified language proficiency as a variable contributing to success in a tertiary setting in Australia. Fiocco's study, with quantitative and qualitative methods, found a cluster of tertiary culture' factors that had an influence. Ginsburg picks this up in her article, quoting Samuelowicz's (1987) findings that revealed adjustment to cultural and educational norms as a significant but low-profile influence on academic achievement.

Of particular significance to this present research project, however, is Fiocco's (1992) study of IELTS as an indicator of tertiary success at Curtin University of Technology in Western Australia. Her study, which reveals a negligible correlation between IELTS and academic success, used a sample of 61 students, including permanent residents, overseas students and some native speakers of English. The IELTS scores ranged from 5.0 to 8.0 and the courses studied were Business (50% of the subjects), Engineering (20%) and the remainder Health, Mathematics, Science, and Social Science. Fiocco concludes that even if a larger sample were studied a similar result would emerge, because English proficiency is only one of many variables that contribute to tertiary success. The second part of her research was a qualitative study in the form of open questions to all 61 respondents. Her findings were as follows: 1) the students' perception of IELTS was positive and it was seen as a fairly accurate assessment of their proficiency; 2) the responses indicated that language does pose a problem and so it is reasonable to include it as a variable that contributes to success; and 3) 50% of the responses from non-English speaking background students expressed a problem related to teaching methods and teacher support, which she interprets as indicating an Australian educational culture barrier, both tertiary-, and domain-specific.

Since the IELTS test is relatively new, there is not yet a body of international research based on it. James and Watts (1992) review academic enquiry into this area in New Zealand over the last 30 years, showing that lack of acceptance by New Zealanders contributes to social barriers, and the students' own lack of English proficiency contributes to academic barriers. They conclude that "there is an obvious need for larger scale studies which would investigate the nature of these concerns in a more precise manner." (p. 8)

The literature, then, guides this study in several ways. In contrast to Fiocco's, the focus of this one was sharpened by drawing the sample only from NESB students and those enrolled in a single field of study, as Alderson suggests. The incorporation of both quantitative and qualitative components allowed for the investigation of the relationship between language proficiency and academic achievement, as well as variables related to the cultural and educational context and learner characteristics.

THE PROJECT

This project studied 38 international students who 1) were tested with IELTS as part of the entry procedures for the programme in the three consecutive semesters from February 1992 to July 1993; and 2) completed at least one course in the first semester of the National Certificate of Business (NCB) programme.

The NCB is a two-year full-time programme, standardised and moderated nationally within New Zealand. A survey of the NCB courses showed that they relied on lectures and textbooks for input and described their purpose in terms of providing knowledge and skills. Responsibility was given to the learners to access help and any facilities they needed. All of the courses except Business Communication demanded a significant level of fluency in specialist vocabulary. Understanding and writing extended academic discourse was basic to all four courses, but Accounting Principles and Computing Concepts had a large proportion of assessed work that did not take the form of a conventional written assignment. Formal speaking skills and paired work were assessed only in Business Communication; otherwise oral interaction was not a high priority. It would seem that language demands were greatest in Economic Environment and Business Communication. The courses appeared to be equivalent academically to first year university papers in similar subject areas, but with the delivery more learner-centred.

The first part of the study tested the hypothesis that the greater the proficiency in English of a student from a non-English-speaking background, the more likely it is that the student will succeed academically in English-medium tertiary education. Part Two explored the question: what factors other than language proficiency influence academic achievement? Telephone or face-to-face interviews were the sources of information for this qualitative component. Of the 38 students, 10 were interviewed by phone or in class in a particular week.

Clearly the small number of students in the population investigated is a fundamental limitation to this study, both in Part One ($N=38$) and in Part Two ($N=10$). Also, it could be argued that by restricting the sample to non-residents, and to those studying in only one programme, the generalisability to wider tertiary student populations is limited; it should be noted, however, that the restricted sample reduces the impact of variables in a heterogeneous academic environment on the dependent variable, academic achievement.

Case Studies

Before embarking on a search for patterns in the findings, we 'meet' four of the students who participated in the study: Sharma, Y Ching, Hiro and Choysen (not their real names).

Sharma came to New Zealand 18 months ago. Now, with good family support, and several years of studying in English behind her, both in her country of origin and in the seventh form in New Zealand, she still finds it hard to make friends. In spite of a really helpful orientation course, the climate and the totally new environment have been difficult to adjust to. The cultural context is what Sharma mentions most in reflecting on her first semester, and it annoyed her that there was no "social space" on the campus: the cafe was too full, and the library too noisy, both indicating students had nowhere to go when not studying. She agrees that IELTS pinpointed her weakness in writing but she nevertheless achieved two C passes and one D and thus started towards her goal of being able to help her parents in their business.

Y Ching studied the same three subjects as Sharma and had a slightly higher language proficiency, but achieved quite different results: a B in Business Communication, but E in both Accounting and Economics. She enjoyed people-oriented subjects and had no background in accounting. The lack of social life and difficulty in making friends with Kiwis was also a problem for Y Ching. Her experience with English in her home country had equipped her well, and the interviewer found her most forthcoming: "One of the hardest things was getting a study permit. I had to go several times, they were always wanting more documents. I always went with a friend . . . I felt humiliated by several difficult experiences. . . . Another thing was getting used to [the institution]. Kiwi students were friendly and co-operative, but made no effort to do their part in a project. . . Language was not a problem for me . . . The tutors have no training in teaching students from a non-English-speaking background, their speaking is too fast and too slurred... The course was very exam / theory oriented; they assumed too much - I had never seen a set of accounts"

Hiro, with an IELTS overall band score which was significantly lower than Y Ching's, managed to achieve a higher academic average in his two courses. In spite of the help of Language Support tutorials, this was not good enough to pass: "I haven't studied enough; there are a lot of assignments - too many - and lots of technical words which the dictionary doesn't help with". Hiro has been accepted for a job with a company conditional on improvement in his English, but cultural aspects ("I don't like the food and the laws"), the workload and finance ("I pay 10 times the Kiwi students' fees") were real hurdles for him. As his IELTS result indicated, writing and speaking were the most difficult skills for him: "Nothing's easy."

Choysen agrees: "Nothing is particularly easy, but I like the Business Communication class with other international students because we can discuss a lot without Kiwi students. I'm not doing well in Accounting because I never studied it before - it's all new." Language surfaces frequently for Choysen as a fundamental problem, and this is reflected in his low IELTS band score. Without even the assistance of Language Support, he persisted, but came nowhere near the required NCB standard. Naturally, he felt the institution should "more look after international students", perhaps with bilingual tutors, assignments rather than examinations, and access to dictionaries during assessment.

Varied language proficiency, diverse opinions, different cultural backgrounds, divergent academic results, and experiences both contradictory and in common - these are the people of this study.

RESULTS

Part One

Tables 1 and 2 provide an overview of the subjects' language proficiency levels and academic results. The measures used were the IELTS ratings on a scale of 1 to 9 (9 being the level of an expert user) and the NCB summative assessment average.

IELTS	Academic Average			Total
	< 25	25-49	50+	
< 5.0	6	9	2	17
5.0 - 5.5	1	4	4	9
6.0 +	1	5	6	12
Total	8	18	12	38

Table 1: Frequency distribution of subjects by IELTS score and academic average (N=38)

	IELTS	Academic Average (%)
Mean	5.25	40.55
Standard deviation	1.05	18.62
Maximum score	7.5	66.7
Minimum score	3.5	0.5

Table 2: Descriptive statistics of IELTS band scores and academic average

Using Pearson's Product Moment Correlation Coefficient, the correlation between the *overall* IELTS score and average score in NCB courses was 0.523 ($p < 0.01$). For the IELTS subtest scores, the correlations were :

IELTS writing score / NCB average:	$r = 0.614$ ($p < 0.01$)
IELTS reading score / NCB average:	$r = 0.418$ ($p < 0.01$)
IELTS listening score / NCB average:	$r = 0.235$ (n.s.)
IELTS speaking score / NCB average:	$r = 0.308$ (n.s.)

The relationship between language proficiency and academic achievement in these results is considerably more significant than those found in other studies (cf. Fiocco, 1992: $r = 0.063$). There are two possible reasons for this. The students in this sample came from a relatively homogeneous academic environment. Other studies, to my knowledge, have not controlled this factor. Secondly, it is also likely that this sample had a wider range of IELTS scores than is usually found in a sample. In 1993, IELTS was relatively unknown in New Zealand as a test of academic English and so students were accepted with low scores. Studies in other contexts, where language proficiency criteria are applied, have a sample in which the least proficient have already been eliminated. This factor must lower the correlation obtained in such studies. This was certainly the case in Fiocco's study, where the range of overall IELTS scores was from 5 to 8.

In this sample of international students, only 6 of the 26 students with an IELTS score of less than 6.0 achieved an academic average of 50 or more. By comparison, out of the 12 students with IELTS band 6.0 or higher, 6 achieved an average of 50 or more. If these results were generalisable to the wider population, this would mean that with scores below 6.0 in IELTS, students have a 20% chance of passing, whereas at 6.0 or more, the chance is 50%, which is still not high. This would confirm the IELTS test guidelines that at 6.5, language proficiency is less likely to be a significant factor influencing academic success.

On the other hand, it must be noted here that certain students with low IELTS scores did achieve an average over 50%, and that a high IELTS score did not guarantee success. In this study, for instance, two students with IELTS scores lower than 5.0 achieved averages of 54.5 and 66.5. Both of them took advantage of Language Support, and took only two subjects: Computer Concepts and Accounting. The student who had an IELTS score of 6.5 and yet achieved an academic average of only 23, attempted three subjects (Accounting, Economic Environment, Business Communication), but did not access Language Support. These three instances of performance, contrary to the expected pattern, clearly suggest that factors other than language proficiency are integral to academic success.

Language Support comprised 6 to 8 hours of small group tuition, concurrent with the mainstream programme, for students who scored less than IELTS band 6.0. Instead of the three courses that made up the usual full-time load, these students took only two, substituting the Language Support classes for the third. Findings are summarised in Table 3.

	No of Students	Mean Academic Average
No Language Support	8	23.03
With Language Support	17	43.2

Point serial correlation coefficient = 0.475

Table 3: Academic performance of students with IELTS scores below Band 6.0, according to whether they received Language Support (N=25)

This is a significant but moderate relationship, suggesting that, for students with limited English proficiency, the combination of a lighter workload in the NCB programme (i.e. two courses instead of three), and concurrent support in the form of language- and subject-based tuition, is likely to lead to better results.

Part Two

The data collected from interviews of the 10 students covered a variety of issues, from reason for studying to reflection on the educational culture, language support and the accuracy of the IELTS diagnosis.

International students in the NCB programme, who are likely to be older than their New Zealand-born classmates, usually have had limited experience of the New Zealand cultural and educational context, but this is offset by their wider experience of life and knowledge of other social and economic systems. It is worth noting that not all of these students are clearly focused on equipping themselves for a career in business. In some cases, this first semester programme was a vehicle for improving English proficiency; for others, a trial run before a longer, more demanding programme; and for others again, it was a course of general usefulness, and even a way of staying in the country prior to permanent residence. It is inevitable that such motivational factors impacted on the achievement of these students.

The usefulness of IELTS as a diagnostic tool was confirmed by the congruence of the lowest IELTS subtest band and student perception of weakest skill during their study programme. This would also depend on the linguistic demands of the courses. Reading and listening are significant in all the NCB courses, but writing is not so demanding in Accounting Principles, and speaking is assessed only in Business Communication. Further investigation of separate language skills along the lines of the tracer study being carried out at the University of Canberra (Denham and Oner, 1992) would be a valuable complement to the predictive validity research. The subjects' perceptions of being international students in New Zealand seemed to indicate that students have a mix of positive and negative experience of language and cultural factors, tending to be negative about the social and practical aspects as well as the educational demands, but positive toward tutor and student support. The significance of these clusters of factors deserves more thorough investigation.

The status of Language Support as an intervention is worthy of more study, particularly from the perspectives of student, language tutor and subject tutor; there is also the broader question of the relative value of language intervention *prior* to tertiary study or *concurrent* with it. The indications of this study suggest the need for a comparative study of a larger sample of international students with, and without, Language Support.

CONCLUSIONS

This investigation has demonstrated that diagnosis, prior to entry, of a potential student's proficiency in English provides valuable information from which the student and academic advisors can negotiate a pathway to academic success. Also, evidence is mounting to indicate that, especially at the lowest levels, language proficiency is a primary factor, along with individual differences, educational environment, and social context, that influences academic outcomes.

Further research is indicated in the areas of:

- the status of prior and concurrent language intervention;
- the relative significance of learner and contextual factors in academic achievement for international students;
- the replication of the study with a larger sample;
- validation of the findings by using alternative measures of academic performance, and of language proficiency.

To return to *te moana pukepuke*, the voyage towards proficiency in English for academic use is not through uncharted waters: there are different routes to be taken, and a range of navigational aids are available. The informed use of IELTS as a guiding instrument means the choppy seas of entry into English medium study *can* be navigated.

He moana pukepuke e ekengia e te waka.

REFERENCES

- Alderson, J. C. (1988). Testing English for specific purposes: How specific can we get? In A. Hughes (Ed.), *Testing English for university study* (pp. 16-28). (*ELT Documents*, 127). [Oxford]: Modern English Publications.
- Burns, R. B. (1991). Study and stress among first year overseas students in an Australian university. *Higher Education Research and Development*, 10, (1).
- Davies, A. (1988). Operationalizing uncertainty in language testing: An argument in favour of content validity. *Language Testing*, 5 (1), 32-48.
- Denham, P.A. & Oner, J.A. (1992). IELTS research project: Validation study of Listening subtest. Unpublished paper. University of Canberra.
- Fiocco, M. (1992). English proficiency levels of students from a non-English speaking background: A study of IELTS as an indicator of tertiary success. Unpublished paper. Centre for International English, School of Communication and Cultural Studies, Curtin University of Technology.
- Ginsburg, E. (1992). Not just a matter of English. *HERDSA News*, 14, (1).
- Graham, J. G. (1987). English language proficiency and the prediction of academic success. *TESOL Quarterly*, 21 (3), 505-521.
- James, G. & Watts, N. (1992). The problems of overseas students in New Zealand universities. *Many Voices*, 3, 5-8. Wellington: Ministry of Education.