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Spoken English proficiency and academic performance: is there a relationship and if so, how do we teach?

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ABSTRACT

From a viewpoint of seeking ways to assist International students to attain their academic potential, the English usage of a group of first year students was examined and parallels found with academic performance. The implications for universities and teachers are discussed and possible teaching strategies proposed. It is acknowledged that the data did not permit a causal relationship to be concluded.

KEYWORDS

International students, English language proficiency, Student learning

INTRODUCTION

Concern over the challenges faced by students from non-English speaking backgrounds (NESB) in coping with their first year of academic work led to this investigation. Many academic staff would question whether NESB students have adequate English proficiency and appropriate learning styles to undertake their studies at university level. Much of the literature focuses on the perceived problems of international students who are seen as "isolated, non-participating and under-performing" Hellmundt et. al. (1998). Nevertheless experience and research have shown that "problems experienced by international students may have more to do with levels of English language proficiency than with styles of teaching and learning" (Reid et. al. (1998) quoted in Briguglio, 2000, p37). This is supported by research by Volet and Renshaw (1996) who conclude that when English language proficiency is not an issue, Asian students tend to obtain better results than local students.

Johnson and Ngor (1996) concluded that Hong Kong students' approaches to dealing with English text are derived from the language teaching practices in Hong Kong which emphasise word meaning with insufficient understanding of grammar. This leads to survival strategies around guessing meanings that may lead to total misunderstandings of text, or of memorisation of complete discourses to enable them to pass exams.

There is evidence that some local students may be using English as a second language. For example, 30 per cent of Macquarie students in 1999 lived in homes where languages other than English are spoken. A further 11.4 per cent of total enrolments were international students.

Although the University requires a level of English competency on entry, this does not necessarily indicate that students' oral and written comprehension is adequate to enable them to cope well at a university level. Frequently the isolation of international students from normal English discourse, both inside and outside the classroom, means that they continue to struggle with the second language in which they are being taught. The purpose of this study was to investigate whether students' English proficiency is in fact related to academic results, as seen in a first year Business course taught by the first author. The author was also concerned to investigate the approaches to learning of the same students as another part of the study. This paper focuses on the former question, namely: is there any relationship between English proficiency and academic results? It was hoped that if some relationship was in evidence, the next step would be to ensure that there is sufficient and appropriate support to enable these students to achieve their potential.

METHOD

To investigate whether there is a relationship between English language proficiency and academic achievement, the researchers analysed the examination results of one cohort of a university first year business subject. A sample of about half the cohort was surveyed using a simple measure of students' familiarity with spoken English, which we shall call *Frequency of Speaking English (FSE)*. Both the class examination results and the survey sample identified students in terms of whether they were International or Local students and by gender.

Frequency of Speaking English (FSE) measure

The comparative levels of English language usage by students was determined by their responses to the *Frequency of Speaking English (FSE)* measure. The students were asked to tick their most appropriate response to the following question:

How often do you speak English?

All the time [] *Most of the time* [] *Some of the time* [] *As little as possible* [].

This measure was used as an indicator of students' competence in oral comprehension and spoken English. It was assumed that students choosing to speak English more often reflects: a greater degree of comfort and confidence in using English (and inherent in this is); a higher level of comprehension, and; a greater ability to understand and participate in English communications including lectures, tutorials, and other course requirements. A higher frequency of speaking English (FSE) would give students additional practice at constructing and negotiating meaning in all aspects of their study.

Measure of academic achievement

Students' results for the whole cohort at the end of the semester were measured as a mark out of a possible 100. Four pieces of assessment were used: a presentation; a project, and; two exams. The presentation and the project were completed in self-selected groups.

The student sample

Students' results were gathered from the cohort of 285 students enrolled in the subject who had submitted at least one piece of assessment (*Group 1*). For the FSE measure a sample comprising 144 students (*Group 2*), was used, chosen on the basis of convenience, as it was not possible to survey the whole class. This sample was comprised of students who attended the first of a series of daytime tutorials and were a sub-set of Group 1.

Group 2 was approximately representative of the whole cohort in terms of gender and percentage of International students. International students comprised 22 per cent of *Group 2* compared with 20 per cent of *Group 1*, while females comprised 53 percent *Group 2* compared with 56 percent of *Group 1*. Thus although the FSE was derived from a sub-sample of the total cohort, and the Measure of Achievement was derived from the entire cohort, the two groups were comparable with regard to the variables significant to the study. It is not possible to know whether the two groups differed on other variables, given the data available.

Analysis of data

Ideally the study would have used paired data, with both FSE and academic achievement recorded for each student. This was not available for this study, however the desirability of paired data for future studies is recognised.

Percentages of students identifying themselves at each level on the FSE scale were calculated in relation to International/Local and gender variables. FSE responses were converted to a four point Likert type scale with a higher number corresponding to a higher FSE. Given that the sample was reasonably representative of the cohort, the mean student mark and mean FSE were calculated for the groups male, female, and sub-groups International and Local for both Group 1 (cohort) and Group 2 (sample). T-tests and F-tests were then conducted on the results from both Groups to discover whether there were significant differences between International and Local students in terms of their English usage (FSE) and in terms of their academic results (marks).

RESULTS

Table 1 indicates that 57 per cent of male and 28 percent of female International students speak English *most or all of the time*. This contrasts with 96 (male) and 99 percent (female) of local students. At the other end of the scale, 43 per cent of male and 77 per cent of female overseas students spoke English *some of the time or as little as possible*, with almost no Local students identifying at this end of the scale.

Table 2 indicates that when considering mean FSEs, International students had consistently lower FSE scores than local students, both male and female, although female students had the lowest scores. It also shows that a similar pattern prevailed in terms of academic achievement. It is interesting to note the gender differences for FSE scores among International students: females were more likely to admit to speaking English as little as possible, and less likely to claim to speak English all the time, compared with their male counterparts (Table 1). The academic results of

International students, however, did not follow the same pattern, with male and female students achieving similar mean marks.

TABLE 1. FSE Response Frequencies by gender and Internationality

Category		n	Frequency of Speaking English			
			As Little As Possible (1)	Some of the Time (2)	Most of the Time (3)	All of the Time (4)
Male	All	67	0%	12%	18%	70%
	International	14	0%	43%	36%	21%
	Local	53	0%	4%	13%	83%
Female	All	77	6%	12%	25%	57%
	International	18	22%	50%	28%	0%
	Local	59	2%	0%	24%	75%
All		144	3%	12%	22%	63%

TABLE 2. International and local students compared in terms of Frequency of Speaking English and academic results.

Category		FSE			Mark		
		mean	n	std dev	mean	n	std dev
Male	All	3.6	67	0.6996	59.6	125	8.3648
	International	2.8	14	0.8018	53.0	27	11.2817
	Local	3.8	53	0.4945	61.4	98	6.3059
Female	All	3.3	77	0.9240	60.1	160	6.7344
	International	2.1	18	0.7254	53.6	29	6.1930
	Local	3.7	59	0.5587	61.6	131	5.9732

To test whether the differences between International and Local students were significant, F values and t-tests of statistical significance were computed for FSE scores and students' marks. Local students scored significantly higher than International students in their FSE scores, both male ($F = 0.014$) and female ($t = 0.000$). Similarly, in their academic results, Local students achieved significantly higher marks than International students (better than 0.05 level of significance), both male ($F = 0.000$) and female ($t\text{-test} = 0.000$).

Significant gender differences occurred only for the FSE scores of International students, where the males scored significantly higher than females ($t = 0.13$).

DISCUSSION

Academic performance and language performance: International and local students

This study presents some evidence that in a first year Business course, success in completing university assessment tasks may be related to proficiency in English. It demonstrated that International students had lower levels of frequency in using English than Local students, and that their academic assessment also was not as high as Local students. While this does not demonstrate a causal relationship, it does demonstrate a clear parallel, and suggests that there may well be a

connection. Further, it is suggested that the study of academic achievement with regard to learning styles may require consideration of students' ability in the language in which study is undertaken.

We have already noted that researchers in the field believe that for students studying in their second language, language proficiency is a greater impediment to their studies than differences in culture and learning approaches (Volet & Renshaw, 1996, Briguglio, 2000, Johnson & Ngor, 1996). Although the use of the FSE as an indicator of English proficiency is a fairly rough measure, it appears to tap into a level of familiarity with English that may well have effects on students' capacity to comprehend and generate spoken and written English, which would significantly interfere with academic learning.

Gender differences among International Students

It was interesting and unexpected to find that for the International students, males scored significantly higher than females on the FSE measure of English usage, although these differences were not reflected in their academic achievement. The FSE measure is a self-reporting instrument, and thus is dependent on the accuracy of students' estimates of how much time they spend speaking English. It is possible that males may have overstated their performance compared with females, and if so, this would be consistent with the findings of Hesketh & Whiteley (1996) with regard to the Higher School Certificate. To test such a hypothesis, further study of the instrument would be needed.

Implications for the university

If in fact these very preliminary findings truly point to a relationship between English proficiency and academic performance there are serious implications for the University as a whole as well as for those who teach students studying in a second language. While an individual's teaching can impact upon students' English proficiency, universities have a more profound opportunity in that they set admission standards. One possible response is for universities to raise the English proficiency level required of International students. While this is a simple matter administratively, conceptually it would demand consideration as to which levels, tests and testing authorities are appropriate. This would be a substantial study in its own right.

Other possibilities at an institutional level include the university having its own post-admissions tests for verification of English proficiency levels before students commence studies (Coley, 1999). For those whose English is insufficient, pre-term courses could be developed as a prerequisite, integrated with the language requirements of the discipline etc. Both of these options would potentially inculcate standards which further facilitate students fulfilling their potential.

Implications for teaching and learning

Essentially, learning requires students to negotiate meaning, as part of the process. At every point language skills are fundamental, being necessary for the correct interpretation of lectures, texts, and assessment tasks. Opportunities for individual teachers to assist students to fulfil their potential can be considered to fall into two categories: accommodation and facilitation. Accommodation refers to actions taken to make a unit less demanding of a student's English proficiency without compromising the standards and content of the unit. Such actions would include: the avoidance of colloquialisms and "difficult" language, particularly in assessment tasks; selection of prescribed texts with regard to their suitability for International students, and; provision of a range of alternative readings which enable students to find one that is linguistically appropriate. There are

limitations to what can be achieved. For example little can be done to accommodate International students engagement with research literature written in their second language.

Facilitation refers to actions taken to promote students' English ability. Clearly there are a number of ways in which this could be approached, however, if it is not an explicit part of the curriculum and it is accepted that FSE parallels academic achievement, then it is reasonable to promote the usage of English by students. Dialogues between academic staff and students are problematic given the large student numbers involved and so teaching strategies which involve ongoing discussion between students is perhaps the more viable approach. In the subject which provided the student sample, dialogue between students is promoted by two group-based assignments. These assignments are structured to require individual research from which the student must abstract meaning and discuss it with the group, and then the group must discuss and prepare its submission. Other strategies such as web-based discussions for groups may also be valuable in this regard.

FURTHER RESEARCH

If we as teachers wish to assist our students in achieving their academic potential, the implications of a link between English competence and students' academic achievement are substantial. Further evaluation of the FSE as an instrument, comparing its outcomes with other measures of English proficiency, and exploring the potential relationship between FSE and academic performance is commended. In particular a more rigorous study utilising matched data, i.e. FSEs and academic results for individual students, is commended to explore this intuitively appealing and potentially useful concept.

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