

# **Higher IELTS score, higher academic performance? The validity of IELTS in predicting the academic performance of Chinese students**

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## **Abstract**

The International English Language Testing System (IELTS) is widely accepted as a reliable means of assessing whether candidates are ready to study or train in the medium of the English language. It consists of four key parts: reading, speaking, listening and writing. Before enrolling onto any HE programmes at the University of Worcester, international students are required to take the IELTS exam and obtain a score of 6.0 and above, indicating a satisfactory command of English. However, despite using the IELTS band 6.0 as an entry criterion, lecturers at Worcester Business School (WBS) still find students' language ability one of the key obstacles in learning and teaching activities. This is especially the case with the Chinese students. Lecturers often feel there is a lack of understanding from the Chinese students, despite the students' possessing sufficient IELTS scores. So, what went wrong? Is there any significant relationship between students' IELTS results and their academic performance?

## **Keywords**

IELTS, academic performance, Chinese students

## **Introduction**

The International English Language Testing System (IELTS) is widely accepted as a reliable mean of assessing whether candidates are ready to study in the medium of English (Charge & Taylor, 1997). It is currently employed by Higher Education Institutions in the UK, Australia and New Zealand as an appropriate language entry requirement for international students. IELTS consists of four key parts: reading, speaking, listening and writing. An overall IELTS score of band 6.0 indicates that the student is a competent user in English, whilst an overall score of band 6.5 is usually accepted as a good score (Lai, 2008). Some universities also include minimum band scores for individual modules in their entry requirements. At Worcester, it is generally believed that students with an overall IELTS of 6.0 will have a satisfactory level of command in English and will be able to conduct studies in an English-speaking environment.

Whilst it has been forecast that, by 2025, Asia as a whole will represent 70% of total global international HE demand (IDP Education Australia, 2002), China, due to its rapid economic growth and large economic scale, has become the largest single source of international students within the UK Higher Education (HE) market (British Council, 2008). From 2006 to 2007, there were nearly 50,000 Chinese students studying at UK Universities (Gill, 2008). This is reflected by the statistics at the University of Worcester, where students from the People's Republic of China stand for 40% of the total number of international students (83 out of 207) in 2009. These 83 students also represent approximately one percent of the total student population. Most of the Chinese students have chosen to study business related subjects here at Worcester Business School (WBS).

At Worcester, before enrolling onto any HE undergraduate programmes, international students are required to take the IELTS exam and obtain an average score of 6.0 and above. For those students who do not meet these requirements, a 10 week course of English study is provided by the University Language Centre to raise their IELTS score to the minimum level. For example, a top-up Chinese student with IELTS 5.5 will have to go through a 10 week language course before starting his/her top-up course here at WBS. However, despite using IELTS band 6.0 as an entry criterion, lecturers at WBS have found these Chinese students' language ability to be one of the key obstacles in learning and teaching activities. These views are demonstrated from the interview quotes obtained from the lecturers.

*"The Chinese students do not even understand what I was saying. One of my students needs a personal interpreter with him so that he can understand the content of the lectures."*

*"They do not understand the assignment criteria. I have to explain it over and over."*

*"Their English ability is just not sufficient. I find it very difficult to understand their arguments when marking their assignments."*

Whilst the system of IELTS has been used as a valid authentication to identify and verify students level of English, students with an IELTS band of 6.0 are supposed to be able to use English competently. The experience in WBS suggests that this may not be the case. Lecturers at WBS often feel that there is a lack of understanding from Chinese students, despite the students having achieved the required IELTS band of 6.0. A similar issue has been raised by Bayliss & Ingram (2006) – although the score a student achieves in an IELTS test is meant to indicate whether the student has a sufficient level of English proficiency to cope with the linguistic demands of the studies in HE, it does not imply that they will succeed academically or that they will not struggle linguistically. So, what went wrong? Is there still a significant relationship between students IELTS results and their academic performance? If so, why can't students cope with their study here at WBS?

## **Literature Review**

The question as to whether IELTS results can be used as a predictive score for a student's academic achievement has been discussed by various academics in the past (Bayliss & Ingram, 2006). Both quantitative and qualitative approaches have been employed to test and explore IELTS' predictive validations. In the quantitative approach, the common strategy is to correlate the students' IELTS scores with their subsequent academic results. Some studies (e.g. Bellingham 1993; Cotton & Conrow, 1998; Feast, 2002) reported a significant correlation; whilst some found no significant correlation between IELTS scores and subsequent academic outcome (e.g. Fiocco 1992; Gibson & Rusek, 1992). In short, the quantitative approach has painted an inconsistent picture. As a result, Oliver & Dooley (2002) suggested that universities need to look beyond language scores when making selection judgements about students.

In the qualitative approach, information was often obtained directly from the students/IELTS test takers to gain some insight into the relationship between English language ability and subsequent academic performance at English medium universities (Gibson & Rusek 1992; Huang, 2001). Students' perception of the difficulties in coping with the language demands of their courses is the most often used criterion (Elder 1993; Fiocco 1992). In comparison to the quantitative approach, the qualitative approach is often used as an add-on, when researchers feel the need

to explore the reasons behind the correlation between IELTS and academic outcome from students' perspective.

Although various studies have been conducted in the past, there are some gaps within the current literature. Firstly, previous studies on IELTS's predicative power have used different ways to measure the factor of 'academic achievement'. For example, whilst Gibson & Rusek (1992) used the grade point average (GPA) in the second semester; Bellingham (1993) used the first semester academic average. Secondly, most of the previous studies have employed heterogeneous samples that include international students from a range of countries with differing ethnicity, gender and age (Huong, 2001). Thirdly, whilst the samples of international students were studying in various disciplines at different schools/departments, their academic achievement was measured from wide-ranging academic disciplines at various study levels (Huong, 2001). Fourthly, despite all the research efforts, most of the IELTS studies and projects were conducted in the Southern hemisphere with international students studying in Australia and New Zealand (e.g. Bellingham, 1993; Huong, 2001; Lai, 2008). Very little research was conducted in the UK.

In order to address these gaps, this research aims to test the correlation using a homogenous group of HND Chinese students who studied business and management course here at WBS in the academic years of 07/08 and 08/09. Whilst this group of Chinese students were similar in age and have studied in business subject disciplines within the same school, this research will be able to examine whether there is a significant correlation between these IELTS results and students' academic performance. Past research has shown that when the tested samples are more homogenous, it was easier to find a reasonably high correlation (e.g. Elder, 1993,  $r = 0.35$ ; Bellingham, 1993,  $r = 0.53$ ).

### **Research Methods**

As stated earlier, this paper aims to verify the relationship between IELTS results and Chinese students' academic performance using a homogenous sample – Chinese students at WBS. In order to achieve the research objective, quantitative data is anonymously collected from the student registry and the data management unit here at the University of Worcester. To verify whether there is any significant relationship between IELTS results and the student's academic performance, Chinese students' IELTS scores are correlated to their academic performance using two GPAs from the first and the second semesters. Pearson correlation tests are then conducted to see whether there is a significant relationship between IELTS results and students' academic performance in semester one & two.

### **Data Analysis & Findings**

In order to obtain a homogenous sample, only Chinese Higher National Diploma (HND) top-up students were selected. This gave us a list of 77 undergraduate students, who started their courses at the WBS in the academic year of 07/08 and 08/09. Because students' IELTS grades were not stored electronically in the system, the researchers had to manually go through students' files to record their IELTS scores. This included the overall average score and the scores for each part – Listening, Reading, Writing, and Speaking. After taking out the incomplete data, we managed to get hold of a sample of 61 completed cases, which included 35 cases from 07/08 and 26 cases from 08/09.

An overview of the sample shows that more than half of the Chinese students entered Worcester Business School with an IELTS score of 5.5 (64.5%) and completed a 10 week intensive language course here at Worcester, whilst a quarter

of the students entered with IELTS score of 6.0 (25.8%) (see Table 1). The majority of Chinese students tended to obtain a 5.5 in Listening (50%) and Reading (37.1%) and a 5.0 in Writing (41.9%) and Speaking (43.5%). On average, Chinese students usually achieved an overall grade of C- (mark = 10.7) in both semester one and semester two with a slight increase in score (mark = 11.1) (see Table 2 for more information).

Table 1: Chinese Students' IELTS Scores

IELTS overall score (N=61)	Percentage (%)
4.6	1.6
5.0	3.1
5.5	62.5
6.0	26.6
6.5	4.7
7.0	1.6

Table 2: Descriptive Overview

N=61	Overall IELTS	Listening	Reading	Writing	Speaking	1 <sup>st</sup> Semester GPA	2 <sup>nd</sup> Semester GPA
<b>Mean</b>	5.7	5.7	5.7	5.4	5.5	10.7	11.1
<b>Median</b>	5.5	5.5	5.5	5.5	5.5	10.7	10.8
<b>Mode</b>	5.5	5.5	5.5	5.0	5.0	11.2	12.5

Correlations were calculated between the overall IELTS scores, each individual test (Listening, Reading, Writing and Speaking) and the GPAs for the first and the second semester. As shown in Table 3, the results showed significant correlation ( $r = .46, p < .01$ ) between the overall IELTS score and first semester's GPA, as well as a significant yet weaker relationship ( $r = .26, p < .05$ ) between the overall IELTS score and second semester's GPA. This indicates that there are positive relationships between Chinese students overall IELTS scores and their academic performance at the WBS. Moreover, significant correlations were also found between first semester's GPA and individual IELTS tests: Listening ( $r = .45, p < .01$ ), Writing ( $r = .41, p < .01$ ) and Reading ( $r = .27, p < .05$ ). However, the correlation between the second semester's GPA and students IELTS tests is less permanent – significant correlation was only found against Listening ( $r = .26, p < .05$ ).

Table 3: Correlation Results

N=61	Overall IELTS	Listening	Reading	Writing	Speaking
<b>1<sup>st</sup> Semester GPA</b>	.46**	.45**	.27*	.41**	-.02
<b>2<sup>nd</sup> Semester GPA</b>	.25*	.26*	.21	.02	.05

\*\* Correlation is significant at the 0.01 level; \* at the 0.05 level.

## Discussions

As is shown in Table 3, significant correlations were found between IELTS scores and student's GPA (from both first and second semesters). A number of predictive validity studies have sought to identify the connection between IELTS scores and academic performance, with inconsistent results. Some studies (e.g. Fiocco 1992; Gibson & Rusek, 1992) have found no link between the two, while others (e.g. Bellingham 1993; Cotton & Conrow, 1998; Feast, 2002) have found generally positive (although sometimes weak or inconsistent) correlations between IELTS entry levels and

GPA. Whilst using a homogenous sample, our study found significant positive correlations between IELTS scores and GPAs and therefore confirms IELTS' predictive power in students' academic performance. This confirms the legitimacy of using students' IELTS scores as an entry criterion.

Moreover, we have also found that IELTS scores could be better used to predict students' GPA in the first semester rather than the second semester, which suggests that over time IELTS' predictive power on students' academic performance has become weaker. This may be because students have improved their command of English, have become accustomed to the UK culture and social norms, and have adapted to the University's procedure and process over time (Zhang & Brunton, 2007).

Further exploring the data, we also found significant correlations between students' GPA in the first semester and their IELTS Listening, Writing and Reading scores. In fact, Speaking is the only module that is not correlated to students' GPA in the first semester. This could be because most of the business lecturers tend to design their assessments based on written exams and assignments (essays and reports) rather than verbal presentations. However, because of the preponderance of written assignments and projects in their modules, Chinese students are at an immediate disadvantage when their Writing skills shown a mean of 5.4, which is below their skill for Listening (5.7) and Reading (5.7).

In comparison, students' GPA in the second semester is only correlated to their IELTS Listening score. This highlights the significance of Listening, as most of the learning and teaching materials here at WBS are given using lectures followed by seminars. Despite all students having obtained an average total score of 6.0, students with a higher Listening score are therefore more likely to understand and engage in the lecture content and the seminar discussions than those who score higher in Reading, Writing and Speaking.

### **Limitations and Future Research**

As discussed earlier, whilst our study confirms the significant connection between IELTS scores and academic performance, all of the correlations are only at a moderate level ( $r < 0.5$ ). This shows there are other possible factors that could be used to predict students GPAs besides IELTS scores, for example, the individual's adaptability to a new learning system, speed of acculturation and their personal goals and ambition. Zhang & Brunton (2007) indicate that socio-cultural influences, such as loneliness, culture shock, educational goals and loss of social networks can all have adverse affects on learning and education. Thus future research is therefore recommended to explore and identify other predictive factors with regard to Chinese students' academic performance.

Considering the quantitative nature of this research, the findings are limited in terms of identifying all the possible reasons that could explain why, despite obtaining an average IELTS score of 6.0, some students still fail to engage during the lectures and the seminars. Thus, future research is recommended by collecting qualitative data in the forms of interviews.

Moreover, whilst this research was conducted by choosing a homogenous sample (Chinese HND top-up students studying in a variety of business degrees at WBS), the sample (N=64) is still relatively small in size. Research by Zhang (2001) between Masters Degree English and non-English majors showed different learning strategies between students of the two. Future research is therefore recommended to test the correlation over a larger sample of students. This could help test the differences

among students on various degree programmes (e.g. Accounting against Marketing), if a large enough number of students could be obtained.

## Conclusions

In short, the findings of this research confirm the positive correlation between grades and IELTS scores based upon quantitative data collected from Chinese students here at the University of Worcester. It shows that low IELTS scores could point to the possibility of students having poorer grades, especially when they have low Listening and Writing results. However, the findings also imply that IELTS' predictive power could gradually weaken over time. As a result, future research is suggested to further explore other non-IELTS factors (e.g. culture shock, educational goals, and individual adaptability) using a qualitative methodology. By taking into account social, educational and individual factors, future research could map out a broader array of reasons for the low student scores attained by Chinese students.

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