

IELTS Research Reports Online Series

ISSN 2201-2982 Reference: 2015/3

Investigating the appropriateness of IELTS cut-off scores for admissions and placement decisions at an Englishmedium university in Egypt

Author: Elizabeth Arrigoni and Victoria Clark, American University in Cairo

Grant awarded: Round 16, 2010

Keywords: "IELTS testing, cut-off scores, predictive validity, correlation IELTS scores and

academic success, the use of IELTS for admission and placement, university"

Abstract

This study investigates whether the IELTS scores established by the American University in Cairo for admissions and placement into English language courses and rhetoric courses are appropriate.

Ensuring that students have sufficient language proficiency for full-time study at an Englishmedium university is a problem that institutions in English-speaking countries struggle with, due to high enrolments of international students. As more English-medium institutions appear outside of English-speaking countries, the need for studies on the use of tests such as IELTS (International English Language Testing System) are necessary for institutions to set cutoff scores that are appropriate and fair. This report describes a study undertaken at an English-medium university in Egypt, where the challenges to students and opportunities for students' language development differ from those faced by international students in an English-speaking context.

The aim of the study was to determine whether the cut-off scores established for various levels of English language support and writing courses are appropriate and fair, by examining student achievement data (course outcomes, grades and scores and GPA), as well as the perceptions of stakeholders towards individual students' placement.

Consistent with studies on the predictive validity of IELTS, the current study found few large or meaningful correlations between IELTS scores and academic success. However, some significant correlations were found between IELTS reading and writing scores and academic success.

There was some variation in students' perceptions towards IELTS and their placement within English and writing courses, as there was in the knowledge of the test among faculty members, but both sets of stakeholders seemed generally positive towards the use of the test and the established cut-off scores.

The use of IELTS for admission and the established cut-off scores seem justified by analysis of student data and stakeholder perceptions. However, more investigation is needed to determine its appropriateness as a tool for placing students in English language and writing courses. This report concludes with recommendations for future research.

Publishing details

Published by the IELTS Partners: British Council, Cambridge English Language Assessment and IDP: IELTS Australia © 2015.

This online series succeeds *IELTS Research Reports Volumes 1–13*, published 1998–2012 in print and on CD. This publication is copyright. No commercial re-use. The research and opinions expressed are of individual researchers and do not represent the views of *IELTS*. The publishers do not accept responsibility for any of the claims made in the research. Web: www.ielts.org

AUTHOR BIODATA

Elizabeth Arrigoni

Elizabeth Arrigoni is a senior instructor and assessment specialist in the Department of English Language Instruction at the American University in Cairo. Her experience in language assessment includes large-scale testing, as well as classroom-and program-based assessment. She has worked in both the U.S. and Egypt, and has conducted training and provided assessment services in Jordan, Oman, Qatar and the UAE. Her professional interests include assessment literacy for educators and fairness in language testing.

Victoria Clark

Victoria Clark has a PhD in Applied Linguistics from the University of Reading, UK. Over the last 20 years, she has worked in the field of EFL/ESL and education in Germany, the Netherlands, Taiwan, Iran, the Russian Federation and Egypt. Currently, she is a senior instructor in the Rhetoric and Composition Department at the American University in Cairo. She has published a series of books on the General English Proficiency Examination (GEPT). Her research interests encompass language assessment and task complexity.

IELTS Research Program

The IELTS partners, British Council, Cambridge English Language Assessment and IDP: IELTS Australia, have a longstanding commitment to remain at the forefront of developments in English language testing.

The steady evolution of IELTS is in parallel with advances in applied linguistics, language pedagogy, language assessment and technology. This ensures the ongoing validity, reliability, positive impact and practicality of the test. Adherence to these four qualities is supported by two streams of research: internal and external.

Internal research activities are managed by Cambridge English Language Assessment's Research and Validation unit. The Research and Validation unit brings together specialists in testing and assessment, statistical analysis and itembanking, applied linguistics, corpus linguistics, and language learning/pedagogy, and provides rigorous quality assurance for the IELTS test at every stage of development.

External research is conducted by independent researchers via the joint research program, funded by IDP: IELTS Australia and British Council, and supported by Cambridge English Language Assessment.

Call for research proposals

The annual call for research proposals is widely publicised in March, with applications due by 30 June each year. A Joint Research Committee, comprising representatives of the IELTS partners, agrees on research priorities and oversees the allocations of research grants for external research.

Reports are peer reviewed

IELTS Research Reports submitted by external researchers are peer reviewed prior to publication.

All IELTS Research Reports available online

This extensive body of research is available for download from www.ielts.org/researchers.

INTRODUCTION FROM IELTS

This study by Elizabeth Arrigoni and Victoria Clark of the American University in Cairo was conducted with support from the IELTS partners (British Council, IDP: IELTS Australia, and Cambridge English Language Assessment) as part of the IELTS joint-funded research program. Research funded under this program complements those conducted or commissioned by Cambridge English Language Assessment, and together inform the ongoing validation and improvement of IELTS.

A significant body of research has been produced since the joint-funded research program started in 1995, with more than 100 empirical studies receiving grant funding. After undergoing peer review, many of the studies have been published in volumes in the *Studies in Language Testing* series (http://www.cambridgeenglish.org/silt), in academic journals and in *IELTS Research Reports*. To date, 13 volumes of *IELTS Research Reports* have been produced. But as compiling reports into volumes takes time, individual research reports are now made available on the IELTS website as soon as they are ready.

Perhaps the largest number of IELTS candidates is students seeking entry into universities in English-speaking countries. There is, however, an increasing number of students studying in English-medium universities in countries where English is not the primary language (cf. Brenn-White and Faethe, 2013). These represent a somewhat different population of users and context of use, so it is no surprise that there is significant interest in exploring how tests such as IELTS might be appropriately used in these institutions. IELTS previously funded one such study in the context of a Spanish university (Breeze and Miller, 2011). The present study by Arrigoni and Clark looks at the context of a university in Egypt. While the earlier study focused on the skill of listening, this study considers all four language skills.

The study provides a glimpse of the challenges faced by English language and rhetoric instructors. One question raised is: should a higher standard be required, given that students will not have exposure to English in the wider environment, or should it be the opposite, because expectations should be tempered for the same reason? Another reality faced by these departments (which likely resonates with many others) is the lack of resource for developing placement tools aligned to their particular curricula. IELTS is, therefore, used for placement into rhetoric courses, even if the construct of the test and the curricula of the courses are not perfectly matched.

So how well does IELTS work as an admissions and placement instrument in this context? This question concerns predictive validity, and, unfortunately, investigating such questions is extremely difficult. An approach often taken is to compare test scores to course grades, but the latter are affected by many factors not related to English language proficiency: course content, student motivation, teacher ability and grading practices, to name a few. In this case, students in rhetoric placed on the basis of high IELTS writing scores obtained grades from F to A, "suggesting strongly that writing ability...is not the only factor that contributes to a student's final score in [rhetoric] courses". Nevertheless, weak to moderate correlations have been found between IELTS

scores and course grades in numerous studies (e.g. Cotton and Conrow, 1998; Humphreys et al, 2012; Kerstjen and Nery, 2000; Ushioda and Harsch, 2011).

Another approach to investigating predictive validity is by eliciting the opinions of teachers and students. In this study, teachers and students generally felt that placement decisions based on IELTS scores were correct and fair. The authors do note though that "the perceptions of the interviewees were sometimes contradictory". Indeed. when students were surveyed about their language ability compared to their peers, larger numbers thought they were stronger than those who thought they were weaker—but everyone cannot be above average, so some of them must be wrong! This should not be taken to mean that studies of perception are without their use. Given that approaches to investigating predictive validity are all in some way limited, perhaps the best option is to combine different approaches to see what overall picture is presented—this is exactly what the authors have done.

The research indicated that there may be reason, in this context, to adjust the minimum accepted IELTS score for their lowest level courses. Revisiting the scores that institutions accept is something that the IELTS partners encourage to be done on a regular basis,. All things being equal, resort to concordance tables should be avoided. Engagement with the test itself and setting standards on that basis is more appropriate and defensible, and the IELTS partners have produced material (e.g. the IELTS Scores Explained DVD) to help with this process. Doing so will help to ensure that institutions have standards that are fair, valid and useful.

Dr Gad S Lim Principal Research and Validation Manager Cambridge English Language Assessment

References to the IELTS Introduction

Breeze, R and Miller, P, (2011), Predictive validity of the IELTS listening test as an indicator of student coping ability in Spain. *IELTS Research Reports*, 12, 201–234

Brenn-White, M and Faethe, E, (2013), *English-taught* master's programs in Europe: A 2013 update. Institute of International Education, New York

Cotton, F and Conrow, F, (1998), An investigation into the predictive validity of IELTS amongst a group of international students studying at the University of Tasmania. *IELTS Research Reports*, 1, 72–115

Humphreys, P, Haugh, M, Fenton-Smith, B, Lobo, A, Michael, R and Walkinshaw, I, (2012), Tracking international students' English proficiency over the first semester of undergraduate study. *IELTS Research Reports Online Series*, 2014(1), 1–41

Kerstjen, M and Nery, C, (2000), Predictive validity in the IELTS test. *IELTS Research Reports*, *3*, 85–108

Ushioda, E and Harsch, C, (2011), Addressing the needs of international students with academic writing difficulties: Pilot project 2010/11, Strand 2: Examining the predictive validity of IELTS scores, retrieved fromhttp://www2.warwick.ac.uk/fac/soc/al/research/groups/ellta/projects/strand_2_project_report_public.pdf

CONTENTS

1 INTRODUCTION	
1.1 Language proficiency and university admission	
1.2 Research objectives	
1.3 Context of the current study	
1.4 Rationale	
2 LITERATURE REVIEW AND THEORETICAL FRAMEWORK	
2.1 Predictive validity	
2.2 The use of English language proficiency tests for placement purposes	
2.3 Stakeholder perceptions	
2.4 Theoretical framework for investigating the appropriateness of cut-off scores	
2.5 Research questions	
3 METHODS AND PROCEDURES	
3.1 Student data	
3.2 Faculty perceptions	
3.3 Students' perceptions	
3.4 Subjects	
3.5 Data analysis	
4 RESULTS	
4.1 Research question 1	13
4.1.1 Placement of ELI students based on IELTS	
4.1.2 Placement of RHET students based on IELTS	
4.1.3 Predictive validity of IELTS for students in ELI courses	
4.1.3.1 Predictive validity and IELTS for RHET	
4.2 Research question 2	
4.2.2 Instructors' perceptions of cut-off scores in RHET	
4.2.3 Administrators' perceptions of cut-off scores in ELI and RHET	
4.2.3.1 ELI administrators' responses	
4.2.3.2 RHET administrators' responses	
4.3 Research question 3	
4.3.1 Results of student questionnaires	
4.3.1.1 Perceptions about familiarity with test	
4.3.1.2 Perceptions about fairness of test	20
4.3.1.3 Perceptions of overall language ability compared to other students in class	
4.3.1.4 Perceptions about amount of time and effort expended compared to others in the class	
4.3.1.5 Perceptions of appropriateness of placement	
4.3.1.6 Perceptions of pace of the course	
4.3.1.7 Perceptions about performance in the class	
5 DISCUSSION AND CONCLUSION	24
5.1 Predictive validity and IELTS	24
5.1.1 Consistent results with other studies	
5.1.2 GPA as a measure of academic achievement	
5.1.3 The interaction of proficiency with other variables	
5.1.4 Time differences between measures	
5.2 IELTS as placement tool	
5.2.1 The determining of cut-off scores and placement	
5.2.2 Stakeholder perceptions of fairness and placement appropriacy of IELTS	
5.3 Limitations	
5.4 Conclusions and recommendations	
ACKNOWLEDGEMENTS	27
REFERENCES	28

List of tables

Table 1: Number of students entering the university with IELIS scores by level	11
Table 2: IELTS cut-off scores for placement into ELI courses	13
Table 3: IELTS results for students entering ELI	
Table 4: IELTS cut-off scores for placement into RHET courses	13
Table 5: IELTS results for students entering RHET	13
Table 6: Correlations between IELTS results and final scores and GPA for students of ELI 98	14
Table 7: Correlations between IELTS results and final scores and GPA for students of ELI 99	14
Table 8: Correlations between IELTS results and final scores and GPA for students of ELI 100	14
Table 9: Correlations between IELTS results and final grade and GPA for students of RHET 101	15
Table 10: Correlations between IELTS results and final grade and GPA for students of RHET 102	15
Table 11: Final outcomes by level in ELI	16
Table 12: RHET 101 and 102 outcomes in terms of grade converted to GPA	
Table 13: ELI instructors' evaluation of students compared to fellow students in the class	17
Table 14: IELTS results for students perceived by instructor to be misplaced in RHET 101 and 102	18
Table 15: Response rate of student questionnaire	19
Table 16: Perceptions about familiarity with test	20
Table 17: Perceptions about fairness of test	20
Table 18: Perceptions about fairness of test by course	20
Table 19: Perceptions about overall language ability compared to fellow students	20
Table 20: Self-assessment of listening ability compared to fellow students	21
Table 21: Self-assessment of reading ability compared to fellow students	21
Table 22: Self-assessment of speaking ability compared to fellow students	21
Table 23: Self-assessment of writing ability compared to fellow students	21
Table 24: Perceptions of time and effort expended in course compared to fellow students	
Table 25: Perceptions of appropriateness of placement	22
Table 26: Perceptions of pace of the course	22
Table 27: Perceptions of performance in the course	23

1 INTRODUCTION

1.1 Language proficiency and university admission

The demand for higher education delivered in the English language has increased dramatically in the past few decades, as evidenced not only by the number of admissions applications from international students seeking to study in English-speaking countries, such as Australia, the UK, and Canada, but also by the rise of English-medium universities established in non-Englishspeaking countries, particularly in the Middle East (Wait and Gressel, 2009). Admissions staff at universities in English-speaking countries have long struggled with the need to ensure that the international students they admit have the requisite language proficiency to meet the demands of their coursework. Such universities have relied on international tests of English language proficiency, such as IELTS (International English Language Testing System) and TOEFL (Test of English as a Foreign Language) to assist in making admissions decisions about applicants' language abilities. However, these tests have no 'passing' scores, leaving institutions to make their own judgments about the level of English language proficiency international students must demonstrate in order to be admitted, whether fully or conditionally.

To further assist admissions personnel in making decisions about international students, the IELTS partners (the British Council, Cambridge ESOL, and IDP: IELTS Australia) have published the *IELTS Guide for Stakeholders*. They have also made available to institutions a DVD entitled *IELTS Scores Explained* to help those charged with standards-setting make informed decisions about appropriate cut-off scores for entry and placement in pre-sessional or in-sessional English language courses. IELTS also provides seminars for stakeholders.

In addition, the IELTS partners sponsor a research agenda, which has resulted in numerous studies that have added to the existing literature investigating the predictive validity of IELTS scores (Criper and Davies, 1988; Elder, 1993; Ferguson and White, 1993; Cotton and Conrow, 1998; Kerstjens and Nery, 2000; Dooey and Oliver, 2002), score gains on the IELTS test (Elder and O'Loughlin, 2003; see Green, 2004 for a summary of studies related to IELTS band score gains in writing), the experiences and impressions of IELTS stakeholders (Smith and Haslett, 2007; O'Loughlin, 2008), and the impact of IELTS use and consequential validity (Feast, 2002; Rea-Dickens, Kiely and Yu, 2007) on both test users and test takers. There is also a sizable body of research that investigates the appropriate level of English proficiency needed for study at the university level (Tonkyn, 1995; Green, 2005; Weir, Hawkey, Green, Devi and Unaldi, 2009), as measured by IELTS or other instruments. However, many of the studies have been inconclusive or show a very weak correlation between IELTS scores and success at the university level. In addition, whether those results are generalisable outside of the contexts in which the studies were conducted is

Despite the wealth of information available, IELTS and prominent researchers in the field of language assessment (e.g., Chalhoub-Deville and Turner, 2000; O'Loughlin, 2008) urge institutions to conduct their own local research to determine whether their cut-off scores are indeed appropriate, especially in contexts outside the UK, Australia and New Zealand. Indeed, universities outside these specific contexts, particularly those outside of English-speaking countries, may impose different demands and offer very different opportunities to their students for the development of language proficiency, both inside and outside the classroom. Although Englishmedium universities may differ depending on their setting, and the number of non-native English speakers to be considered, they all face the same dilemma, which is determining cut-off scores that are high enough to avoid admitting students whose English proficiency is too low to succeed in their university-level studies, and at the same time, avoiding setting cut-off scores that are so high they exclude students who could succeed and make a contribution to the university despite their less developed language proficiency.

It is the goal of the current study to determine the appropriateness of the overall and writing IELTS cut-off scores for undergraduate admission to the American University in Cairo (AUC), an English-medium university in Egypt whose students are primarily nonnative English speakers, as well as for placement in or exemption from English language courses and writing courses. This study also hopes to provide recommendations for minimum scores in one or more of the other IELTS modules (reading, listening, or speaking). While the results of this study may not be generalisable outside the study's context, it may add to the literature concerned with the predictive and consequential validity of IELTS. It may also provide guidance for other institutions that are using or contemplating using IELTS in establishing appropriate cut-off scores. However, it is hoped that given the similarities of the academic demands at AUC to those of other American and American-style universities, and the relatively large number of subjects to be considered (compared to many other predictive validity studies), this study may contribute to finding solutions to the challenge of setting appropriate minimum full and conditional admissions scores.

1.2 Research objectives

The current study intends to determine the appropriate IELTS cut-off scores for the following decisions:

- Admission to the American University in Cairo (AUC)
- Placement in pre-sessional or in-sessional courses in the university's Department of English Language Instruction (ELI)
- 3. Placement in, or exemption from, the university's 100-level Rhetoric and Composition (RHET) courses.

The collection and analysis of student records, the analysis of questionnaires administered to instructors and students, and the use of interviews will assist the

American University in Cairo in establishing whether the IELTS cut-off scores in use are appropriate. The study will either (a) provide evidence that the IELTS cut-off scores established at AUC for admissions and placement decisions are appropriate and perhaps provide recommendations for the use of sub-scores, or (b) provide recommendations for adjustments to raise or lower cut-off scores.

1.3 Context of the current study

The American University in Cairo (AUC) is a private, American-style liberal arts university located in Egypt. It was founded in 1919 by Americans and enjoys the status of a foreign university in Egypt, and it is fully accredited in both the United States and Egypt. The language of instruction is English. Although the university has both undergraduate and graduate programs, only the undergraduate programs and students are addressed in the current study.

AUC is an English-medium university, which means students applying for admissions must demonstrate a certain level of English proficiency to be granted full admission. For many years, AUC has accepted TOEFL scores as one way for students applying for admissions to demonstrate their language proficiency. Students failing to achieve the scores required for full admission are offered conditional admission and, based on their scores, are required to enrol in and pass one of three programs in the university's Department of English Language Instruction (ELI). Students granted full admission with TOEFL scores above the minimum required for full admission can also be eligible for exemption from one of the two 100-level Rhetoric and Composition (RHET) courses that are required of freshmen.

All applicants must demonstrate the same level of language proficiency for full admission, no matter their intended major and the extent to which an intended major is "linguistically demanding" or not. Because AUC is liberal arts university, all students are required to complete certain "core" requirements in order to graduate with a number of courses which require the ability to read, write, and participate in discussions in a variety of disciplines. However, the courses in the core curriculum are not the only courses which can be considered "linguistically demanding". A study conducted at the university to determine writing requirements in various disciplines found that all departments had at least several courses which could be considered "writing intensive" (Arrigoni, 1998), meaning that they required at least 10 pages of writing during the semester. Although the study is not current, the fact that AUC students are now required to take three RHET courses before they can graduate, and the transformation of what had once been a Freshman Writing Program into a fully-fledged Rhetoric and Composition Department offering specialised and advanced writing courses, suggests that the need for strong writing skills at the university has only increased.

As many of the courses that new students take during their first two years at the university demand academic skills as well as a certain level of proficiency, the programs in the ELI do not focus only on improving students' language proficiency; these programs are also tasked with helping students to develop academic skills, such as conducting library research, avoiding plagiarism, and critical thinking. As the focus is not solely on developing language proficiency, one may speculate whether students improve their language proficiency at a slower rate than if their ELI courses involved only language skills. However, studies such as Green's (2007) comparison of ELI and IELTS preparation courses suggest that this may not be the case. Within each of the semester-long programs in the ELI, students receive between 175 and 350 hours of instruction, depending on the level. Studies which have investigated improvement in language proficiency as measured by band score gains on IELTS (O'Loughlin and Arkoudis, 2009; see Green, 2004 for a discussion of studies related to band score gains on the writing module) have been unable to definitively determine the number of hours needed to achieve an increase in language proficiency as measured by a half band or full band on IELTS.

In May 2010, AUC administration approved the use of IELTS for admissions, placement in ELI programs, and eligibility for exemption from RHET courses. Although a number of faculty and staff participated in discussions to set appropriate cut-off scores, there is as yet no evidence to support the appropriateness of these cut-off scores.

1.4 Rationale

Although much research has been devoted to the study of IELTS, the vast majority of this research has focused on English-speaking countries, especially the UK, Australia and New Zealand. There is very little research on the use of IELTS outside of these three countries, with a few exceptions, such as Malaysia (Gibson and Swan, 2008). There does not seem to be any research conducted on the use of IELTS in Egypt, despite the fact that Egypt is one of the top 40 countries in volumes of test-takers, according to Cambridge ESOL: Research Notes (2009, p 31). Furthermore, the test is not nearly as well-known in Egypt, and only one other English-medium university seems to use IELTS for admissions and placement in English language programs (Arrigoni, 2010). There may be important differences in the cut-off scores required for admissions and placement using IELTS outside of the context of an English-speaking country; this study hopes to address this issue. It is possible, as suggested by respondents in Arrigoni (2010), that the IELTS test is less prevalent in Egypt than its American counterpart, TOEFL, because many test users do not consider IELTS to be relevant to a context outside of English-speaking countries. Potential test users may wonder how effectively the test may function in their particular

In addition to providing information on how IELTS and IELTS cut-off scores may be effectively used at an English-medium university in a non-English-speaking country, this study is intended to contribute to the increasing body of research that examines stakeholder perceptions of the IELTS test, as well as provide specific instances of the consequences of the misuse of a test, or, rather, the use of inappropriate cut-off scores in making decisions about admissions, placement in English language courses and exemption from writing courses.

In addition, this study hopes to contribute to the body of research on the predictive validity of IELTS, especially in English language and writing courses at an Englishmedium university in a non-English-speaking country.

Locally, the importance of this study cannot be overstated. Since the American University enjoys a strong reputation in Egypt and throughout the Middle East, it is the responsibility of the university to undertake the study and monitoring of IELTS test use and cut-off scores to ensure that any negative consequences can be avoided or minimised as much as possible. It was intended that this study would result in the determination of the appropriateness of cut-off scores for all levels of English instruction and admission.

2 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Predictive validity

Although many of the earlier studies concerned with the predictive ability of an English language proficiency test on the performance of international students at the tertiary level focused on the TOEFL exam (e.g., Graham, 1987; Light, Xu and Mossup 1987; Johnson, 1988; Vinke and Jochems, 1993), a number of studies have since explored the predictive validity of the IELTS exam in specific contexts. Not surprisingly, these studies report varying results. For example, in her study examining the difficulties faced by students in a teacher training program, Elder (1993) found moderate correlations between students' writing, reading and listening subtest scores and the difficulty these students reported in their coursework. On the other hand, Fiocco (1992, cited in Cotton and Conrow, 1998) was unable to find any significant relationship between IELTS scores and academic success.

Also in Australia, Cotton and Conrow (1998), in their study of a group of international students, relied on GPA, staff assessments and student self-assessments. They found no correlation between GPA and IELTS scores. and only small correlations between these measures of student success and IELTS scores. Kerstjens and Nery (2000) similarly found a predictive effect of about 8–9% of IELTS scores on academic performance, but also noted that a number of additional psychological and sociocultural factors exert an influence on performance, according to faculty. This finding is in line with Criper and Davies' (1988) validation study of IELTS, which found a correlation of 0.3 between language proficiency (as measured by ELTS, the precursor to IELTS) and academic success. Additionally, Humphreys et al. (2012) investigated changes in language proficiency of international undergraduate students at an Australian university over their first semester. In this study, the researchers found that reading and writing correlated strongly with GPA, perhaps suggesting the need for minimum scores on IELTS sub-tests.

Outside of Australia, Breeze and Miller (2011), investigating the predictive ability of the IELTS listening module on student performance in programs taught in English at a Spanish university, found small to moderate

correlations between the listening module and students' performance. They proposed that this was likely due to the fact that listening is an important skill in the Spanish context, where understanding lectures is a key part of academic success

Hill, Storch and Lynch (1999) examined the usefulness of both IELTS and TOEFL for predicting success in an Australian context. The authors found that while IELTS scores correlated more strongly with academic success than did TOEFL, they concluded that neither test was particularly useful, as a number of other factors, including language support, play a greater role in international students' success. Dooey and Oliver (2002) found that IELTS did not correlate with academic success, as students with higher scores were often not successful in their courses, whereas students with lower scores were able to succeed, due to factors such as motivation.

The lack of consistency in the findings of these studies has to do with several factors, one of which is differing definitions of what is meant by 'success'. GPAs, one of the measures used, is problematic due to the fact that students take different courses and the demands of these courses necessarily vary and, while a certain level of language proficiency may be necessary to meet those demands, it is certainly not sufficient, as demonstrated by native speakers who fail university-level courses. In addition, other studies have suggested that the predictive value of proficiency tests diminishes over time and may be more apparent in certain fields of study, especially those which are linguistically more demanding.

It should be mentioned that nearly all of these studies were conducted in English-speaking contexts, with the notable exception of Breeze and Miller's (2011) investigation of the predictive power of the IELTS listening module on success in programs taught in English at a Spanish university and it is not clear the extent to which language proficiency (as measured by a test such as IELTS) plays a role in academic success, given that a non-English speaking context may provide fewer opportunities for students to further develop language skills. On the other hand, students at an English-medium university in their home country do not face the same psychological and sociocultural challenges that international students do. The authors therefore caution that, "results from English-speaking countries cannot simply be transferred to other situations where many of the parameters are utterly different" (2011, p 6).

While it might seem that the findings from previous validity studies are hard to reconcile, it is perhaps the reality that different levels of language proficiency are required in different contexts, whether an institution or a country. However, as Hill, Storch and Lynch conclude, "nobody would argue that ELP [English language proficiency] has no role to play in academic achievement and, furthermore, [tests such as IELTS] may be used to help identify students who should be encouraged to seek ESL assistance or to participate in intensive pre-course ESL" (p 72).

2.2 The use of English language proficiency tests for placement purposes

The aforementioned predictive validity studies are concerned with using IELTS and/or TOEFL for making decisions about whether or not to admit non-native English-speaking students to either an undergraduate or postgraduate program of study. However, few studies have examined the use of scores from tests such as IELTS and TOEFL for placement in language support programs. As Kokhan (2013) states "the problem of using standardised admission test scores for purposes other than originally intended is under-researched" (p 471), despite the fact that the use of tests such as TOEFL and IELTS for placing students in language support programs is commonplace. In a survey of 95 English-medium universities in the Arabic-speaking countries of the Middle East and Africa, Boraie, Arrigoni and Moos (2013) found 19 instances of using TOEFL as a placement tool, and 19 instances of the use of IELTS for this purpose, with two of the universities using IELTS for both admission and placement. While this study established that the use of standardised English proficiency tests for placement is not uncommon in this region, the study did not investigate the specific ways in which test scores were used for placement, beyond the selection of tests and the cut-off scores used, nor did it seek to examine the impact of this test use.

The existing research on the use of tests such as IELTS and TOEFL for placement suggests that this use can be problematic. For example, Fox (2009) investigates the impact of a policy at a Canadian university allowing international students to use scores from TOEFL and IELTS for placement in EAP courses (rather than scores from the university's in-house exam), finding that teachers and students were affected by occurrences of misplacements and large ranges in language abilities among students in the same class. Fox also found evidence that the concordances between IELTS and TOEFL used by the university were inaccurate, which may have explained the lower performance of students enrolled in the EAP courses.

Kokhan's (2013) study on the use of scores from three U.S.-developed admission exams (only one of which is a language proficiency test) concludes that the chance of undergraduate students being misplaced in ESL classes was 40% when these tests were used in place of a locally developed placement test. She advocates using internally developed placement exams that are aligned with the curriculum of existing ESL courses, while acknowledging that some institutions do not have the resources to do so and instead must rely on standardised proficiency tests.

An interesting point raised in Kokhan's study was that the two purposes of admission and placement are quite at odds: according to Morante (1987) (cited in Kokhan, 2013), the goal of admission tests is to help make distinctions between strong candidates, while placement tests make distinctions among 'less proficient' candidates. One may well question whether a single test is capable of making such a distinction.

2.3 Stakeholder perceptions

Since the earliest *IELTS Research Report* taking into consideration the perceptions of stakeholders appeared 15 years ago (McDowall and Merrylees, 1998), researchers of language proficiency tests seem to be increasingly more aware of the importance of considering various stakeholders, especially students and the instructors who interact with them. That being said, however, some studies reveal that many stakeholders are relatively uninformed about the test.

McDowall and Merrylees (1998) surveyed various Australian institutions to ascertain the extent to which IELTS is used, and in their investigations found that "institutions may use IELTS but with little understanding of what an IELTS score actually signifies and what level of predictive validity it offers" (p 116). More than a decade later, O'Loughlin (2008) found that that both faculty and students at an Australian university demonstrated "variable levels of knowledge about the IELTS...including a lack of understanding among both groups as to what different IELTS scores imply" (p 145).

Smith and Haslett's study conducted in New Zealand, where the "IELTS brand is well-known" (2007, p 2), found that IELTS is the preferred language assessment but also reported on some negative anecdotes received toward the test. The authors further found that the decision-makers responsible for selecting tests and cutoff scores generally believed the test provided accurate information, but also cautioned that, because of the perception of tests like IELTS as "gate-keepers", there is a need for test users to be better informed about the test.

On the other hand, Coleman, Starfield and Hagan (2003) found that students tended to be better informed about IELTS than other stakeholders. In their study conducted in Australia, the UK and China, the researchers found that academic staff were often less positive in their attitudes towards IELTS than students were, although members of both groups questioned policies related to the cut-off scores and the level of language proficiency these scores represent. O'Loughlin (2008) also found that students' opinions of IELTS were positive, with the majority of student subjects indicating they thought their scores were accurate.

Because of the high stakes nature of tests such as IELTS, it is expected that some negative perceptions of the test would form; however, it seems that in many cases, this is due to a lack of understanding of what tests themselves can do and what levels of language proficiency are indicated by different band scores. In fact, what many stakeholders seem to object to is the setting of cut-off scores, which is a decision made by institutions, not the IELTS program itself. Studies such as Kerstiens and Nery (2000) recommend the formation of "informational seminars on IELTS and other entry-level criteria used for admission" (p 105) to enhance the understanding of academic staff of their students' abilities and weaknesses. (While IELTS does now provide informational DVDs and seminars, few stakeholders take advantage of these offerings.)

2.4 Theoretical framework for investigating the appropriateness of cut-off scores

The design of the study, which will be discussed in the following section, is intended to ascertain whether the use of the established cut-scores can be justified, or whether they need to be adjusted. Although the overall aim of the current study is practical, the research is grounded in validity theory, especially as it relates to the interpretation and use of test scores. While Messick's (1989) unified model of validity has integrated a number of aspects of validity (construct validity, relevance and utility, value implications and social consequences), many researchers continue to focus on predictive validity, perhaps because of the very practical aims of their research and its immediate application. In the past few decades, however, the issue of impact or consequential validity has been a major focus in the field of language assessment (Hamp-Lyons, 1997; McNamara and Roever, 2006; Shohamy, 2008). It is for this reason that the research design includes both quantitative and qualitative

There is growing recognition in the field of language assessment that impact must be considered when using tests to make decisions. As Shohamy (2008) has notably asked: "Why test? Who benefits? Who loses?" (p 371). As many stakeholders are aware, there are serious consequences associated with test use or "misassessment" (Rees, 1999), a term which, in this current study refers to the use of cut-off scores to make decisions which are not supported by evidence and which may have unintended consequences. Universities are well aware of the consequences of setting cut-scores too low; accepting students whose language proficiency is insufficient for the demands of tertiary education lowers the standards of departments and the university itself, and can damage the university's reputation. It also strains resources, such as support services, especially in pre- and in-sessional language support programs. But the consequences can be even more damaging for individuals; many students make significant financial investments to attend English-medium universities hoping to succeed. Besides the financial setbacks as a result of failing, or being required to take (and perhaps re-take) pre-sessional English courses which delay students' studies, there is a high emotional and personal cost to students who do not succeed. Even for those students who do succeed, there is often a high 'cost' associated with this success, of "the additional time and effort students needed to expend in order to cope with their studies, over and above the time and effort they believed a native-speaker in their cohort had to expend to achieve the same result," as defined by Banerjee (2003,

The current study is intended to validate the cut-scores established by AUC. Setting appropriate cut-scores will minimise the number of stakeholders who 'lose', such as students being rejected, misplaced, and disqualified from the university, and maximise the number of stakeholders who benefit from the proper placement of students.

As stakeholders, especially test developers, attempt to reconcile the psychometric properties of a test with the real-life experiences of individuals, many attempts have been made to expand upon Messick's unified model of validity to create a "validity framework" (Lynch, 2001, cited in Bachman, 2005) or a "test fairness framework" (Kunnan, 2003, cited in Bachman, 2005). One such attempt can be found in Bachman (2005). In this article, Bachman attempts to devise an "assessment use argument" in order to provide a clear connection between test use and consequences. As Messick (1989) asserts, two types of evidence are necessary to support the use of a test; the test must be shown to be relevant to the use being made of it, as well as the decisions being made as a result. It must also be shown that the test is useful for making such a decision. The current study makes the assumption that both types of evidence exist for IELTS, based on its widespread use for making the sorts of decisions being considered by this study.

Bachman's assessment use argument consists of two parts: a validity argument and as assessment utilisation argument. The current study cannot hope to construct a validity argument for IELTS; however, its intent is to investigate and perhaps even validate the setting and use of cut-scores from the perspective of the assessment utilisation argument. This argument involves four types of warrants to justify the use of test scores, the first two of which are relevance and utility. As previously stated, this study operates under the assumption that these two conditions have been met. The second two, *intended consequences* and *sufficiency*, are the focus of the current study.

The purpose of setting cut-scores is to minimise the negative consequences that have been discussed earlier in this section. As Bachman (2005) writes, part of justifying the use of a test is dependent on evidence that "the consequences of using the assessment and making intended decisions will be beneficial to individuals, the program, company, institution, or system, or to society at large"(2005, p 19). Setting appropriate cut-off scores for conditional and full admission to AUC will be beneficial to students, to their classmates and instructors, to the programs and departments, and the university. Students will not struggle needlessly, nor will they be required to take unnecessary language support courses. Students who are appropriately placed in the ELI courses based on their IELTS scores will certainly benefit from the instruction they appear to need.

The other warrant to be considered is sufficiency, that is, whether the IELTS test provides sufficient information about an individual's language proficiency to make decisions about admissions and placement. Because AUC has set cut-off scores only for the overall and writing scores and not the sub-scores for the other three modules, the current study will make recommendations for considering at least one of the other sub-scores in making admissions and placement decisions in order to strengthen the argument for AUC's use of IELTS.

2.5 Research questions

In order to determine whether the established cut-off scores for the various levels of English language support and eligibility for exemption from writing courses were appropriate, three research questions are addressed. These three questions attempt to establish the extent to which the established cut-off scores represent appropriate levels of English proficiency for placement in levels of English support or eligibility for exemption from writing courses, according to two groups of key stakeholders: students and instructors.

- To what extent can students' IELTS entry scores predict students' achievement in their courses in the Department of English Language Instruction (ELI) and the Rhetoric and Composition Department (RHET) at the American University in Cairo?
- 2. To what extent do *instructors* in the ELI and RHET at AUC believe that the established IELTS cut-off scores are effective in placing students in the correct level of ELI or for exempting students from writing courses?
- 3. To what extent do AUC students feel that the admissions and placement decisions made based on their IELTS scores are appropriate and fair?

3 METHODS AND PROCEDURES

This study is essentially a case study, and it employs both quantitative and qualitative methods. While the first phase (exploring the relationship between IELTS scores and outcomes in ELI and RHET courses) may be sufficient to determine whether the IELTS cut-off scores are appropriate for admissions and placement decisions, it is felt that additional information may be required for two reasons. First, as suggested by Hamp-Lyons (1997), taking into account the perceptions of stakeholders is necessary. In addition, a test score on its own may not be sufficient information about an individual's language proficiency and potential; it is necessary to investigate the experiences of both instructors and students as to the possible limitations of the test in this regard. Similar to Kerstjens and Nery's (2000) study, the current study "focuses on investigating the predictive validity of the IELTS test in [a] particular context" but also relies on the perceptions of both faculty and students in order to "gain a closer and more personal participant perspective, and gain further insights on the relationship between English language proficiency and academic outcomes" (p 88).

Four types of data collection procedures were used to address the three research questions. Research Question 1 involved the collection of student data, which included students' IELTS scores submitted to the university with their application materials, outcomes for the ELI or RHET course each student was enrolled in, course scores (ELI) or grades (RHET) and GPA. Research Question 2 required instructors to provide their perceptions of individual students' placement or language skills.

In addition, interviews were conducted with six faculty members in the two departments with administrative duties. To address Research Question 3, students who entered the university in the Fall semester (September–December) of 2012 and the Spring semester (February–June) of 2013 were asked to complete a questionnaire related to their perceptions of the test they took (whether TOEFL or IELTS) to provide evidence of language proficiency. The university's Institutional Review Board approved the methodology.

3.1 Student data

As mentioned above, several forms of student data were collected: students' IELTS and TOEFL scores submitted to the university with their application materials, outcomes for the ELI or RHET course each student was placed into, course scores (ELI) or grades (RHET) and GPA. When students submitted more than one set of scores, the scores providing the higher placement were used. When two or more sets of scores resulting in the same placement were submitted by a student, the most recent set was used.

Data were collected for over 1100 students entering the university between the Fall 2010 and Spring 2013 semesters with IELTS scores. However, some students were removed from the data set. Those who withdrew from the university during the semester, or who changed their placement from ELI to RHET through an in-house writing exam were removed. In addition, students with incorrect scores (e.g., a total or overall score that is not the average of the sub-test scores) or incomplete data were also removed from the data set. On the other hand, students who changed their placement within the RHET department were retained in the data set, with the rationale that IELTS functions mainly as an admissions test for RHET courses, which are writing, not language support, courses. Students entering the university with IELTS scores during this period represented about 37% of all admitted students; however, the total percentage of students entering the ELI was closer to 60%. Table 1 shows the number of students entering each level of ELI and RHET courses between Fall 2010 and Spring 2013 on whom data were collected.

Course levels	No. of students
ELI 98	73
ELI 99	155
ELI 100	564
Total ELI	792
RHET 101	132
RHET 102	166
Total RHET	298
Total all levels	1090

Table 1: Number of students entering the university with IELTS scores by level

3.2 Faculty perceptions

Although the original study design included data collection from instructors about their perceptions of IELTS, it became apparent in the early stages of the study that this part of the methodology would be problematic. In the ELI, some instructors were concerned about the ability of the IELTS exam to place students correctly (as they were when the university began to accept scores from the TOEFL exam as evidence of English language proficiency in the 1990s). Additionally, the lack of success of a specific cohort of students placed mostly with IELTS scores in the ELI had led some instructors to form a bias against the test, despite the lack of firsthand knowledge of the specific features of the test.

On the other hand, instructors in the RHET department were more likely to have a background in first-language writing, rhetoric, communication and creative writing, rather than TESOL, and therefore were largely unaware of either TOEFL or IELTS. Therefore, it was decided to try to ascertain the perceptions of instructors indirectly, through questionnaires about their students' placement or their students' strengths and weaknesses relative to other students in their class, as well as through interviews with administrators from both departments who had at least some familiarity with the IELTS exam and extensive knowledge of the university's admission and placement policies.

It was decided to use instructor evaluations of individual students' placement in courses, and supplement these with interviews with instructors who have administrative duties in the two departments (ELI and RHET) and therefore were expected to have greater knowledge of the university's admission and placement policies. The evaluation forms were used an indirect way of determining whether or not students entering with IELTS scores were placed appropriately.

The evaluation forms used for ELI and RHET differed somewhat. Courses in the ELI are either intensive (ELI 98 and ELI 99) or semi-intensive (ELI 100), and instructors generally meet with their students for 12 to 15 hours a week, while RHET courses meet for only three hours weekly. It was felt that RHET instructors would be unable to evaluate their students on any criteria other than writing ability and academic preparedness; even after piloting the questionnaire, the form was further revised to ask specifically about misplacements, while in the ELI, evaluation forms asked about specific skills (listening, reading, speaking, and writing), as well as "academic preparedness", which was defined as "the extent to which a student has the necessary academic skills, strategies, attitudes, and behaviors needed for higher education, including understanding academic conventions and being able to make use of university resources (such as the library, computers, etc.)."

Semi-structured interviews were also conducted with six faculty members (three each in ELI and RHET) who have administrative duties to probe their knowledge of and perceptions about the IELTS exam.

3.3 Students' perceptions

A questionnaire was administered to students entering the university in Fall 2012 and Spring 2013, with questions that sought to determine students' familiarity with IELTS, how fair they believed the test to be, and how appropriate they believed their placement to be. Students were also asked to evaluate their language abilities and the time and effort they needed to spend relative to their peers in the class, among other questions that sought to provide indications of the appropriateness of students' placement. Students were required to provide consent for their responses to be used and were reassured that any information they provided would be kept confidential.

3.4 Subjects

The subjects included both students and faculty. The students are undergraduates who entered AUC between Fall 2010 and Spring 2013 using IELTS scores as evidence of their level of English proficiency. These students are nearly all native Arabic speakers of Egyptian nationality in their late teens.

Unlike the students, the instructors who provided evaluations of their students are a rather varied group; instructors may be Egyptian, American, British, or of yet another nationality. Their experience teaching ranges from a few years to several decades. In addition, their experience teaching non-native English speakers varies considerably, as does their level of familiarity with IELTS as an international language proficiency test.

Faculty who were interviewed in the ELI and RHET are instructors who have administrative duties. No further information can be provided without revealing their identities, but it should be noted that all six faculty members are experienced instructors within the departments they represent.

3.5 Data analysis

Although other studies have relied on more advanced methods, such as linear regression, the current study is less concerned with the exact nature of the role of language proficiency in academic success than it is concerned with setting cut-off scores that are demonstrably appropriate and fair in that they represent sufficient levels of language proficiency for study. Therefore, correlations were calculated to indicate the relationship between IELTS scores and final outcomes in ELI, RHET and GPA. Since language proficiency is a necessary but not sufficient condition for academic success, the relationship between the two is not necessarily linear. Therefore, Spearman's, rather than Pearson's, correlation coefficient was used to analyse data. In addition, the researchers calculated the percentage of students passing at each score band and half band for the overall scores and sub-scores of students entering with IELTS scores.

Student questionnaire responses are displayed in terms of frequency and percentages, as is information about the placement of students. Once interview data were transcribed, content analysis was performed and responses were grouped by recurring themes.

4 RESULTS

4.1 Research question 1

To what extent can students' IELTS entry scores predict students' achievement in their courses in the Department of English Language Instruction (ELI) and the Rhetoric and Composition Department (RHET) at the American University in Cairo?

For students placed in the ELI, this question was addressed by correlating the students' IELTS overall and sub-test scores with their final scores in reading and writing exams and their GPA once they were enrolled in credit-bearing classes. The IELTS scores for ELI students were also correlated with their outcome (i.e., placement into the subsequent course).

For students placed in RHET courses, this question was addressed by correlating the students' IELTS overall and sub-test scores with their final grade and GPA as well as their pass rate.

It is important to note that students who withdrew from courses, but not from the university, have been retained in some of the analyses related to RHET, based on the fact that students who withdraw from a RHET course during the semester are not required to withdraw from any other courses in which they are enrolled, unlike students who withdraw from ELI courses. Therefore, students who withdraw from a RHET course may not have a final grade for RHET, but they may still have a GPA for that semester. It is because of this that not all analyses will include the full 298 students entering RHET courses with IELTS scores.

4.1.1 Placement of ELI students based on IELTS

Minimum cut-off scores for IELTS Overall Band Score as well as for the individual component of writing were set for placement into the ELI courses. Table 2 below shows the cut-off scores.

ELI COURSES	IELTS OVERALL	IELTS WRITING
98	5	5
99	5.5	5.5
100	6	6

Table 2: IELTS cut-off scores for placement into ELI courses

	ELI 98 (N=73)	ELI 99 (N=155)	ELI 100 (N=564)
Listening	5.0 (0.8)	5.9 (1.0)	6.8 (0.9)
Reading	5.2 (0.5)	5.7 (0.7)	6.3 (0.8)
Speaking	5.3 (0.7)	5.8 (0.8)	6.5 (0.8)
Writing	5.3 (0.3)	5.7 (0.3)	6.2 (0.3)
Total	5.3 (0.4)	5.8 (0.4)	6.5 (0.5)

Table 3: IELTS results for students entering ELI

In Table 3, the means and standard deviations of the IELTS scores of students which were used to place them into the ELI courses (98, 99 or 100) are displayed.

In total, 792 students were placed in ELI courses based on their IELTS scores, the majority of whom were placed into ELI 100, the highest level English courses offered to students.

4.1.2 Placement of RHET students based on IFLTS

Minimum cut-off scores for IELTS Band Score as well as for the individual component of writing were set for placement into the RHET courses. Table 4 below shows the cut-off scores.

RHET COURSES	IELTS OVERALL	IELTS WRITING
101	6.5	7
102	7	7

Table 4: IELTS cut-off scores for placement into RHET courses

The means and standard deviations of the IELTS scores of students which were used to place them into the RHET courses (101 and 102) are shown below in Table 5.

	RHET 101	RHET 102
	(N=132)	(N=166)
Listening	7.3 (1.0)	8.0 (0.7)
Reading	6.7 (1.0)	7.3 (0.9)
Speaking	6.9 (0.2)	7.4 (0.8)
Writing	7.1 (0.9)	7.2 (0.3)
Total	7.0 (0.5)	7.5 (0.4)

Table 5: IELTS results for students entering RHET

Only 298 students were placed into RHET courses based on their IELTS results, compared to 1255 students who were placed with TOEFL scores. For placement into both RHET 101 and 102, a writing score of 7 is needed. The difference between the two courses' placement requisites lies in the IELTS Overall Band Score; in both RHET 101 and 102, the average scores of students placed into those levels of writing courses exceed the cut-off scores. Also of note is the fact that the average IELTS writing scores of students admitted during this period differ very little by level, especially in relation to the overall and other sub-test scores.

4.1.3 Predictive validity of IELTS for students in ELI courses

To address the question of the extent to which students' IELTS entry scores can predict students' achievement in their courses in ELI, correlations were calculated between the IELTS scores (band scores and the scores for each sub-skill) and the scores awarded for the final reading and writing examinations in the ELI 98, 99 and 100 courses, as well as for the students' overall GPA. Each result was tested for statistical significance (P < 0.05 * and P < 0.01 **). The results are shown below in Tables 6, 7 and 8.

In Table 6, the results for ELI 98 students showed low correlations between the IELTS scores and results for the final reading and writing examination. In fact, there were also some negative correlations for the results of the final scores and the IELTS writing component. Concerning the students' GPAs, low and even negative correlations were

found. It is interesting to note in particular that IELTS writing scores have very weak negative correlations, even with the final writing score in ELI 98.

Table 7 shows the results for the ELI 99 students and, similar to the results for ELI 98 students, there were relatively low correlations between the IELTS scores and results for the final reading and writing examination. Only the reading component of IELTS showed some positive correlation with the final reading and writing examination (0.42 and 0.32 respectively). As for the GPA, mostly low and some negative correlations were found. Again, it appears that the reading component of IELTS had the highest level of correlation of all the IELTS sub-skills, though these figures are still relatively low

Finally, for the students in the ELI 100 course, the results displayed in Table 8 showed some positive correlations between the IELTS scores and results for the final reading and writing examination. The reading and listening components had the highest correlation with the final reading examination (0.59 and 0.44 respectively). Again, mostly low correlations were found for the GPA. Similar to the other ELI courses, it appears that the reading component of IELTS had the highest level of correlation of all the IELTS sub-skills, and was statistically significant (P < 0.01). It seems that among IELTS scores, it is the reading score that provides the most predictive ability for students' success in ELI courses.

(N= 73)	Listening	Reading	Speaking	Writing	Total
Final Reading	0.33 *	0.26 *	0.21 **	-0.21 *	0.42 *
Final Writing	0.30 *	0.28 *	0.32**	-0.18 *	0.36**
Overall GPA	0.02	-0.03	0.28 *	-0.07	0.14 *

Table 6: Correlations between IELTS results and final scores and GPA for students of ELI 98

(N= 155)	Listening	Reading	Speaking	Writing	Total
Final Reading	0.16 *	0.42 **	0.08	-0.16	0.29 **
Final Writing	0.08	0.32 *	0.09	-0.06	0.20 *
Overall GPA	-0.21 *	0.26 *	-0.18	0.01	-0.14

Table 7: Correlations between IELTS results and final scores and GPA for students of ELI 99

(N= 564)	Listening	Reading	Speaking	Writing	Total
Final Reading	0.44 **	0.59 **	0.23 **	0.16 *	0.56 **
Final Writing	0.27 **	0.34 **	0.32 **	0.15 *	0.42 **
Overall GPA	0.02	0.22 **	0.00	0.06	0.12 *

Table 8: Correlations between IELTS results and final scores and GPA for students of ELI 100

(N=132)	Listening	Reading	Speaking	Writing	Total
RHET 101 (N=126)	0.20	0.27 *	0.08	0.06	0.29 **
First Semester GPA	0.09	0.32 *	-0.12	-0.09	0.17 *
Overall GPA	0.07 *	0.07 *	-0.05 **	-0.04	0.17

Table 9: Correlations between IELTS results and final grade and GPA for students of RHET 101

(N=166)	Listening	Reading	Speaking	Writing	Total
RHET 102 (N=149)	0.19 *	0.35 **	-0.03 *	0.01	0.20 *
First Semester GPA	0.17 *	0.29 **	0.08 *	0.07	0.25 *
Overall GPA	0.10	0.29 **	0.07 *	0.00	0.23 *

Table 10: Correlations between IELTS results and final grade and GPA for students of RHET 102

4.1.3.1 Predictive validity and IELTS for RHET

Tables 9 and 10 show the results of the correlations that were calculated between the IELTS scores (band scores and the scores for each sub-skill) and the grade awarded for the RHET 101 and 102 courses, as well as for the students' first semester GPA and overall GPA. Each result was tested for statistical significance. It should be noted that six of the 132 students admitted with IELTS scores withdrew from RHET 101 and 17 out of 166 from RHET 102 and so they do not have a final grade in the course for their first semester. Therefore, correlations between IELTS scores and RHET 101 grades in Tables 9 and 10 represent only 126 and 149 students, respectively, while correlations between IELTS scores and GPA, both first-semester and overall, represent 132 students and 166 students respectively.

As shown in Table 9 and 10, there were mostly low correlations between the IELTS scores and results in the RHET courses. Perhaps surprisingly, students' RHET 101 and 102 final grades did not correlate with their IELTS writing scores. However, it must be mentioned that RHET courses focus as much on the process of writing as on the product, as well as the use of academic sources in writing, neither of which is well-captured in the writing section of IELTS (or TOEFL, for that matter). In addition, most students placing in RHET with IELTS have a score of either 7 or 7.5, while their final RHET grades vary from F to A, suggesting strongly that writing ability (as measured by IELTS) is not the only factor that contributes to a student's final score in RHET courses.

As for the students' GPAs and IELTS results, very low correlations were found for students in both courses. Interestingly, similar to the results for ELI students, the reading component had the highest of the correlations in general for course grades and first semester GPA for RHET 101 (0.27 and 0.32 respectively) and for RHET 102, the correlations between the reading component and course grades, first semester GPA and overall GPA were the highest found (0.35, 0.29 and 0.29, respectively). However, these correlations, all of which were statistically significant, are still relatively low. Thus, it appears that IELTS is generally not a good predictor of course grades in the RHET courses and academic

achievement of the students (as shown in their course grade, first semester and overall GPA).

Again, interestingly, the results for the higher level course of RHET 102 were found to be more statistically significant than the RHET 101 course, with the results for the reading sub-skill for IELTS being highly statistically significant (P < 0.01) for all measures of academic achievement used in this study.

4.1.3.2 Predictive validity and outcomes

Table 11 shows the outcomes of students by level, i.e., whether students failed (0), passed to the next level (1), skipped one level (2), or skipped two levels (3). For example, a student who entered ELI 98 and, based on the results of his/her final examinations, was placed into RHET 101 would be categorised as 3, as this student would have skipped two levels (ELI 99 and ELI 100). No student included in the current study skipped more than two levels; it should also be noted that ELI 100 students can only be placed in RHET 101 or 102 at the end of the semester, which means that 3 is not a possible outcome for ELI 100 students.

The outcomes were broken down not only to see the rates at which students at each level pass or fail when placed with each test, but also to show the rates at which students skip levels when placed with each test. While an outcome of 0 might indicate that a student was placed too high (and therefore could not succeed at that level), outcomes of 2 or 3 might indicate that a student was placed too low. Both types of misplacement are of concern to the ELI, although it should be noted that outcomes at either end do not necessarily indicate misplacement but might rather reflect the many other factors that are involved in student success (e.g., motivation, effort). In addition, the rate at which students improve their levels of language proficiency may vary considerably; some students may need more time to improve than others, and some may need far less time than others. Outcomes of 0, 2, and 3 may be indicative of the differential rate at which language proficiency increases, rather than the inability of a certain test to place students accurately.

Initial level	Outcome	Number	%
	0 (Fail)	8	10.96
E1100	1	13	17.81
ELI 98	2	48	65.75
	3	4	5.48
Total pass rate for 98		73	89.04
	0	31	20.00
E1100	1	81	52.26
ELI 99	2	27	17.42
	3	16	10.32
Total pass rate for 99		155	80.00
	0	30	5.32
ELI 100	1	414	73.40
	2	120	21.28
Total pass rate for 100		564	94.68

Table 11: Final outcomes by level in ELI

As shown in Table 11, if assumed that passing to the next level would indicate correct placement and failing the course or skipping 1 or 2 levels could suggest incorrect placement, it is clear that for the courses in ELI, the main concern is the 98 level course as only 17.81% of the students appeared to have been 'correctly placed'. However, few instructors reported this sort of misplacement in the 98 level, which could indicate that gains made at lower levels of proficiency may be more substantial than those made at higher levels. For the ELI 99 course, around 27% of the students managed to skip 1 or 2 levels and around 21% for ELI 100.

Table 12 below shows the outcomes of students in RHET 101 and 102. The grades reflect the calculated GPA from the letter grades awarded to the students (A = 4, A = 3.7, B = 3.4, B = 3.0, B = 2.7, C = 2.4, C = 2, and C = 0).

		N	%
101	Fail	4	3.03
Grade	2.0 – 2.7	12	9.09
Grade	3.0 – 4.0	110	83.33
	Withdraw	6	4.55
	Total	132	
102	Fail	5	3.01
Grade	2.0 – 2.7	21	12.65
Grade	3.0 – 4.0	123	74.10
	Withdraw	17	10.24
	Total	166	

Table 12: RHET 101 and 102 outcomes in terms of grade converted to GPA

From the table above, it is clear that the vast majority of the students passed the course with relatively high grades. As 3.0 - 4.0 reflects the range of grades between B and A, we can assume that the students were placed appropriately in the class, or even that the cut-off scores were higher than necessary. Perhaps with a lower cut-off point, students may have been successful in this course.

4.2 Research question 2

To what extent do instructors in the ELI and RHET believe that the established IELTS cut-off scores are effective in placing students in the correct level of ELI or for exempting students from writing courses?

This question was addressed through means of questionnaires and semi-structured interviews, the results of which are found below.

4.2.1 Instructors' perceptions of cut-off scores in ELI

In the ELI, a questionnaire was administered over four separate semesters, asking instructors to evaluate each individual student in their class in listening, reading, speaking, writing and academic preparedness. Students who were evaluated as stronger as, or weaker than, their fellow students in three or more areas were considered to be misplaced. Although the response rate was high (72%), a decision was made to discard a number of responses since some instructors rated more than half the students in a class as stronger as, or weaker than, the rest of the class. It is also possible that instructors who did not provide evaluations of their students failed to do so because they felt none of their students were noticeably stronger or weaker than their classmates.

Of the 446 students for which accurate information was collected (representing about 67% of students entering with IELTS scores during this period), equal numbers of students were perceived by their instructors to be noticeably stronger or weaker than their peers (N=39 for each). However, this varied by course level, as nearly all of the students with IELTS scores who were considered to be stronger than their peers were placed in ELI 100. Table 13 shows both the numbers and percentages of students who were evaluated as stronger or weaker by their instructors.

Course	Weaker	Stronger
ELI 98	5/38 (13.2%)	3/38 (7.9)
ELI 99	15/97 (15.3%)	1/97 (1.0%)
ELI 100	19/311 (6.1%)	35/311 (11.2%)
Total	39/446 (8.7%)	39/446 (8.7%)

Table 13: ELI Instructors' evaluation of students compared to fellow students in the class

The fact that a relatively high percentage (11.2%) of students entering ELI 100 with IELTS scores were considered to be placed too low is unsurprising, given that many of these students have borderline writing scores—i.e. one-half band below the required writing score of 7 on IELTS. As the cut-off score for ELI 100 is 6-6.5 for writing, the fact that many at the 6.5 level were perceived stronger (and perhaps able to succeed at a higher level) lends support to the advice from major testing organisations not to use "rigid cut-off scores". To do so may cause students to be placed in language support courses they may not actually need.

In examining the pass rates of students who were considered by their instructors to be weaker than their peer, only 43% passed the course (N=17). However, this may have much more to do with academic preparedness (defined to instructors as "the extent to which a student has the necessary academic skills, strategies, attitudes, and behaviours needed for higher education, including understanding academic conventions and being able to make use of university resources [such as the library, computers, etc.]"), as nearly every student entering with IELTS who was evaluated as weaker was also considered to be academically unprepared.

4.2.2 Instructors' perceptions of cut-off scores in RHET

Somewhat different from the questionnaire completed by ELI instructors, the questionnaire to instructors of RHET courses asked respondents to indicate which students in their course they perceived to have been misplaced, in the sense that they believed the student did not have the ability to succeed in the course. Instructors were not asked to indicate whether students should have been placed in a higher level, since many students "self-place", meaning that they will register for RHET 101 despite being eligible for RHET 102, as RHET 101 is considered to be easier than the higher-level course. On the other hand, students who place into RHET 101 are also offered the opportunity to sit for an in-house writing test to exempt from RHET 101, although it could not be determined how many students take advantage of this opportunity, and of these, how many are not successful in their attempt to exempt from this course.

RHET questionnaires were returned for 76 students entering RHET 101 and 143 students entering RHET 102 with IELTS scores, representing about 73% of all students entering these courses with IELTS scores. As mentioned earlier in this study, more students enter RHET courses with TOEFL scores than with IELTS scores.

The means of the IELTS scores of those students perceived as misplaced were calculated, as shown in Table 14. In RHET 101, the percentage of students placed with IELTS who were considered "misplaced" is nearly 16%, while at the RHET 102 level, nearly 14% of students placed with IELTS were considered misplaced. Since a number of instructors chose not complete the questionnaires, it is possible that they failed to do so because they did not perceive any students as being misplaced, which means that the actual percentages of students misplaced with IELTS may in reality be much lower than the percentages given in this section. However, it is interesting to note that for all scores except writing, the mean score of the misplaced students is lower than the mean scores of all students admitted during this period (see Table 5). Also, it is surprising to see that there is little difference in scores between students placed in RHET 101 and 102, with scores for misplaced students in RHET 102 in some cases lower than those of misplaced students in RHET 101. This includes an overall score of 6.7 for misplaced students in RHET 102, despite the fact that the required overall score for placement in RHET 102 is 7.

This is likely due to the fact that students who place in RHET 101 are eligible to take an internal writing exam to exempt themselves from the course. Those who choose to do so may in fact lack some of the needed skills and abilities to be successful in the higher level RHET course, causing them to noticeably struggle in the course. Conversely, it is possible that some students who were eligible for RHET 102 enrolled in RHET 101 instead, bringing up the average scores slightly.

Course	Listening	Reading	Speaking	Writing	Overall
RHET 101 (N=12/76)	6.8 (0.9)	6.5 (0.9)	6.5 (1.1)	7.1 (0.5)	6.7 (0.5)
RHET 102 (N=20/143)	6.8 (1.2)	6.4 (0.8)	6.2 (0.7)	7.2 (0.7)	6.7 (0.6)

Table 14: IELTS results for students perceived by instructor to be misplaced in RHET 101 and 102

4.2.3 Administrators' perceptions of cut-off scores in ELI and RHET

Semi-structured interviews were conducted with administrators in both ELI and RHET, who were believed to be knowledgeable about the university's policies regarding language proficiency in placement and admissions. These administrators also had experience teaching in their respective departments. Altogether, three ELI administrators and three from RHET were interviewed.

Overall, due to a lack of knowledge among the administrators of the IELTS exam or understanding of what different score bands meant, it was difficult to gain strong insights into the appropriateness of the use of IELTS or of the cut-off scores established for placement in the two departments from this part of the methodology. In addition, the perceptions of the interviewees were sometimes contradictory – some felt that IELTS was performing well, while others questioned its ability to discriminate among students of varying linguistic abilities. However, in conducting content analysis of the transcripts from the six interviews, several common themes emerged. These included:

- Administrators' perception of knowledge of **IELTS** examination
- Administrators' perception of appropriacy of 2. cut-off scores
- 3. Necessity or possibility of implementing a minimum cut-off score for the sub-skills
- 4. Comparison of TOEFL and IELTS
- Variables other than proficiency that influence academic success
- Possibility of other sources of evidence for placement and admissions.

4.2.3.1 ELI administrators' responses

While all three of the ELI administrators (Administrator 1, 2 and 3) claimed to have at least 'some' to 'good' knowledge of the IELTS examination, only one was able to correctly describe the format of the test and identify the cut-off scores used for placement in the ELI. Despite this, they all agreed that the cut-off scores were appropriate and none commented on making them higher or lower for IELTS band score or the writing component. However, all three mentioned that it might be beneficial to introduce a minimum score for the reading component as they all mentioned that this was one of the students'

main problems, as indicated by the following comments.

"The students' reading skills are less well-developed than their writing skills." (Administrator 3)

"To read two or three chapters is a challenge to many of our students." (Administrator 2)

Two of the administrators commented negatively about IELTS. One compared it to TOEFL, claiming that it is not as accurate as TOEFL as it appears easier to get a higher score in IELTS than in TOEFL. The other asserted that IELTS is not reliable. The following comments clarify their positions.

"TOEFL is more accurate than IELTS." (Administrator 2)

"My impression is it [IELTS] is not reliable. Many of our students who did well had the same score as those who did not." (Administrator 1)

As for the success and failure of their students in the courses, all three mentioned that language proficiency was not the only indicator of academic achievement. Other factors such as the poor quality of education the students received prior to entering the AUC, as well as factors such as motivation and study skills, were noted. As Administrator 1 stated:

"Maybe it's the combination of...poor English and not so good school. They [students in ELI 98] don't even have the edge of being high-achievers. So if you have poor language and poor achieve[ment], your chances are so much more limited".

Administrator 2 also questioned whether students' educational background had more effect on achievement than language ability.

"We have the same number of students in the class, but not the same quality of schools now. I had better writers, better thinkers. Is it the kind of education they have had? Is it the type of test they have sat for? I'm not very sure. I think things have changed over those 20 years, when I look over the files I have. Things have changed...Maybe something to do with the education itself or the type of student we are getting."

Finally, one administrator suggested that IELTS or TOEFL may not provide sufficient evidence for both admissions and placement. Her opinion can be seen in her comment below.

"I would not object if we had the resources to pay for an outside second [placement] test or develop our own." (Administrator 3)

4.2.3.2 RHET administrators' responses

The three RHET administrators (Administrator A, B and C) claimed to have little to very good knowledge of the IELTS examination. Interestingly, unlike the ELI administrators, there were noticeable differences in their perception as to the appropriacy of the cut-off scores. For one administrator (Administrator A), the cut-off scores were appropriate as few faculty members complained to him about misplaced students. He also made an interesting comment about the fact that a score of 7 was necessary to enter the RHET courses, which is deemed relatively high for a freshman writing course. He explained the reason for not having a lower cut-off score in the following comment.

"If a student is going to a native-speaker university in a native-speaking environment, then it is different. We don't have that luxury." (Administrator A)

He was implying that a high standard of writing to enter the RHET courses was desirable at the AUC as English may only be heard or used at the university and thus a student's proficiency in the language may be slower to develop.

In contrast to Administrator A's perception of the appropriateness of the cut-off scores, both Administrators B and C argued that the cut-off score was irrelevant as "there is no correlation between the [IELTS] test and the skills in our courses, so it makes no difference for the cut-off" (Administrator B). Similar views were expressed by Administrator C who made the following comment.

"I don't know about raising cut-off scores. The course and the test are based on different things. Our courses are not just about language proficiency. They are about handling texts."

Two administrators mentioned that language proficiency was not the main problem of the students and not an indicator for success and failure. Both Administrator A and C mentioned the problem of lack of cognitive skills and abilities of the RHET students, with Administrator A going as far as to suggest the need for "a discriminatory test that allows us to measure a level of competence in language and to some extent in cognitive ability when it comes to reading" so that students are capable of handling the course work. Administrator C also mentioned the lack of academic preparedness of the students in RHET and their poor writing and critical reading skills.

Finally, Administrator A made it clear that additional placement tests or an in-house designed one "from a realistic point of view would not work", given the lack of resources of the RHET department to design, administer and perhaps grade such a test.

4.3 Research question 3

To what extent do AUC students feel that the admissions and placement decisions made based on their IELTS scores are appropriate and fair?

To answer this question, new students who had been placed into ELI or RHET courses that semester were invited to complete an online questionnaire. In the questionnaire, the students were asked to comment on the following:

- 1. Their familiarity with IELTS
- 2. Their perception of the test's fairness
- Their overall language ability and ability in the four skills relative to the other students in the class
- 4. The time and effort they expended in the class relative to the others in the class
- 5. Their perceptions of the pace of the course they were placed in
- 6. Their perception as to their placement in their current course.

The total number of new students surveyed and the response rate can be seen in Table 15.

Level	Total number new students placed with IELTS	Total number responding to questionnaire	Response rate
ELI 98	18	14	77.78
ELI 99	70	63	90.00
ELI 100	253	159	62.85
RHET 101	131	59	45.04
RHET 102	165	28	16.97
Total	635	323	50.87

Table 15: Response rate of student questionnaire

As shown in Table 15, the total number of new students entering with IELTS scores from Fall 2012 and Spring 2013 who responded was 323 (out of a possible 635 students). The response rate was far higher in the ELI courses as the instructors meet with their students for three hours daily as opposed to three hours a week for the RHET instructors, thus giving the ELI instructors greater opportunity to encourage their students to complete the online questionnaire.

Although students were encouraged to add comments about the test they took, relatively few took the opportunity to do so. However, there were some cases in which the comments provided some additional insight into the questionnaire results. It should also be mentioned that not all students responded to all of the questions. When one or more students failed to respond to a question, it is indicated with an asterisk in the following tables.

4.3.1 Results of student questionnaires

4.3.1.1 Perceptions about familiarity with test

From Table 16 it can be seen that 83.59% of students placing with IELTS indicated they were somewhat or very familiar with the test they had taken before the test date. However, this study did not attempt to characterise 'familiarity' in the question and it is possible that, as with administrator interviews, further probing would have revealed less familiarity with the test than reported by the subjects.

	N	%
Not at all	53	16.41
familiar		
Somewhat	205	63.47
familiar		
Very familiar	65	20.12

Table 16: Perceptions about familiarity with test

4.3.1.2 Perceptions about fairness of test

According to Table 17, around one fifth of the students who responded perceived IELTS as being 'unfair', while more than half considered the test to be fair. Nearly a quarter was unsure. Looking at the results by course (see Table 18), there is no clear pattern by level. Even students who placed at the lowest level of English instruction were more likely to consider the test fair than unfair, which may indicate a certain level of face validity amongst AUC students. Perhaps surprisingly, a significant proportion of students placed with IELTS into RHET 102 and to a lesser extent, ELI 100, perceived the test as unfair. However, the fact that 32% of students placed in RHET 102 believed the IELTS to be "unfair" is misleading, as some of the additional comments provided by respondents referred to placement policies, rather than the test itself. One student commented that the problem was not the test itself, but the cut-off score required for placement into a higher level course. The student claimed that "the grades AUC wants is not fair".

In addition, another student indicated that students from American diploma schools in Egypt had to take language proficiency tests, while students in the British schools could use their A-level results as evidence of language proficiency. In addition, several students indicated that the university should have its own placement test; this may be a result of students' perception of a mismatch between what the IELTS test actually measures and what the requirements of ELI and RHET courses are.

	N	%
Don't know	78	24.15
Not fair	67	20.74
Fair	178	55.11
Total	323	

Table 17: Perceptions about fairness of test

	Don't know %	Unfair %	Fair %
ELI 98	28.57	21.43	50.0
ELI 99	34.92	19.05	46.03
ELI 100	22.01	21.38	56.60
RHET 101	22.03	15.25	62.71
RHET 102	14.29	32.14	53.57

Table 18: Perceptions about fairness of test by course

4.3.1.3 Perceptions of overall language ability compared to other students in class

Students who entered the university with IELTS scores seem generally confident in their overall language ability compared to their peers, with more than three-quarters rating themselves as *the same as* their peers, and nearly 20% as *stronger than* their peers in the course. Table 19 displays the perceptions of the students about their overall language ability compared to their peers. However, it is clear that the vast majority (nearly 97%) of students believe their overall language ability to be comparable to, or better than, that of their peers in class.

	N	%
Weaker	11	3.42
The same	249	77.33
Better	62	19.25
Total	322*	

^{*} Not all students answered this question.

Table 19: Perceptions about overall language ability compared to fellow students

Tables 20, 21, 22 and 23 show the students' perceptions of their ability in the four skills (listening, reading, speaking and writing) compared to the other students in their class. In all four skills, there was a higher percentage of students rating themselves as weaker than their peers than the percentage of students rating themselves weaker in *overall* language ability, indicating that students' language abilities are variable across skills.

Speaking is the skill in which the largest percentage of students rate themselves as weaker, perhaps because they are more likely to observe their peers' speaking ability more than writing ability and almost certainly reading and listening abilities.

	N	%
Weaker	29	9.06
The same	232	72.50
Better	59	18.44
Total	320*	

^{*} Not all students answered this question.

Table 20: Self-assessment of listening ability compared to fellow students

	N	%
Weaker	40	12.38
The same	224	69.35
Better	59	18.27
Total	323	

Table 21: Self-assessment of reading ability compared to fellow students

	N	%
Weaker	50	15.53
The same	200	62.11
Better	72	22.36
Total	322*	

^{*} Not all students answered this question.

Table 22: Self-assessment of speaking ability compared to fellow students

	N	%
Weaker	40	12.38
The same	220	68.11
Better	63	19.50
Total	323	

Table 23: Self-assessment of writing ability compared to fellow students

4.3.1.4 Perceptions about amount of time and effort expended compared to others in the class

Table 24 shows that a majority of students at each level of ELI and RHET courses believe they must exert the same amount of time and effort as their peers in the course to be successful, with the lowest percentages at the 98 and 102 levels.

The largest percentages of students who felt they had to work harder than their peers to be successful in the course were in the RHET 102 and ELI 98 courses, although it should be noted that the total number of respondents from the ELI 98 level is low (N=14) so this finding may not be very significant. Only at the ELI 100 level did more respondents indicate that they needed to exert less time and effort than their peers rather than more, with the highest percentage of students indicating they needed to exert more time and effort than their peers in RHET 102, followed by ELI 98.

Whether these findings indicate a lack of confidence in language abilities or a lack of academic preparedness is unclear.

Level			
		N	%
ELI 98	Less	3	21.43
	More	4	28.57
	The same	7	50.0
	Less	9	12.70
ELI 99	More	12	19.05
	The same	42	66.67
ELI	Less	30	18.87
100	More	27	16.98
	The same	102	64.15
RHET	Less	9	15.25
101	More	13	22.03
	The same	37	62.71
RHET 102	Less	4	14.29
	More	10	35.71
	The same	14	50.0

Table 24: Perceptions of time and effort expended in course compared to fellow students

4.3.1.5 Perceptions of appropriateness of placement

As expected, when students were asked about their placement in the ELI and RHET, very few believed that their placement was too high (only 5 out of 323). Table 25 shows that at all levels, the majority of respondents believed their placement was "just right", although students in the ELI, especially at the 100 level, were more likely to believe that their placement was "too low".

Whether this indicates misplacement is uncertain, especially in light of the previous tables, in which lower percentages of students felt they needed to exert less time and effort to be successful in the course and in which lower percentages of students rated their language abilities as higher than those of their peers. On the other hand, the fact that over a third of respondents in the ELI 100 level consider their placement too low may indicate that the use of rigid cut-off scores for writing may lead to students being excluded from the RHET courses, where they may have been successful.

Level				
Level				
		N	%	
	Just right	10	71.43	
ELI 98	Too low	3	21.43	
	Too high	1	7.14	
	Just right	49	77.78	
ELI 99	Too low	14	22.22	
	Too high	0	0	
ELI	Just right	99	62.26	
100	Too low	59	37.11	
	Too high	1	0.63	
RHET	Just right	48	81.36	
101	Too low	10	16.95	
	Too high	1	1.69	
RHET 102	Just right	22	78.57	
	Too low	4	14.29	
	Too high	2	7.14	

Table 25: Perceptions of appropriateness of placement

4.3.1.6 Perceptions of pace of the course

Students were also asked to provide their perceptions of pace of the class they were in, as shown in Table 26. Students entering the ELI were more likely to perceive the pace of their course as being "just right" than those in RHET. For the ELI courses, these results are generally in line with the students' perceptions of their own abilities and time and effort they needed to exert in the class, although it should be noted that more students perceive the pace as too fast than perceive themselves as misplaced.

The fact that the two RHET courses have the largest percentages of students who think the pace is too fast is interesting. These findings may indicate that perception of the pace of the class are perhaps less related to language proficiency but rather academic preparedness, reflecting differences in demands between secondary school and university. However, given the pass rates reflected in Table 11, it may be concluded that while many students find their courses challenging, they are still able to succeed.

Level			
		N	%
	Too slow	0	0
ELI 98	Just right	12	85.71
	Too fast	2	14.29
	Too slow	5	7.94
ELI 99	Just right	50	79.36
	Too fast	8	12.70
ELI	Too slow	19	11.95
100	Just right	128	80.50
	Too fast	12	7.55
RHET	Too slow	6	10.17
101	Just right	37	62.71
	Too fast	16	27.12
RHET 102	Too slow	2	7.14
	Just right	17	60.71
	Too fast	9	32.14

Table 26: Perceptions of pace of the course

4.3.1.7 Perceptions about performance in the class

As seen in Table 27, the majority of students at all levels except RHET 101 indicated that they believed they would need to work hard in their course in order to succeed, with the lowest percentage of students indicating confidence that they would succeed at the ELI 98 level. Very few students (only 3 in the ELI as a whole and none in RHET) believed they would fail their course. Again, students seem to perceive their courses as challenging but certainly not impossible.

Level			
		N	%
ELI 98	I will have to work hard to pass this course.	9	64.29
	I am confident I will pass this course.	3	21.43
	I do not think I will pass this course.	1	7.14
	I have not received enough feedback.	1	7.14
	I will have to work hard to pass this course. I am confident I will pass this course.	33	52.38 41.27
ELI 99	I do not think I will pass this course.	1	1.59
	I have not received enough feedback.	3	4.76
ELI 100	I will have to work hard to pass this course. I am confident I will pass this course. I do not think I will pass this course. I have not received enough feedback.	81 74 1 3	50.94 46.54 .63 1.89
RHET 101	I will have to work hard to pass this course. I am confident I will pass this course. I do not think I will pass this course. I have not received enough feedback.	18 36 0 5	30.51 61.02 0 8.47
RHET 102	I will have to work hard to pass this course. I am confident I will pass this course. I do not think I will pass this course. I have not received enough feedback.	15 12 0	53.57 42.86 0 3.57

Table 27: Perceptions of performance in the course

5 DISCUSSION AND CONCLUSION

This study was motivated by the necessity to determine whether the cut-off scores for the various levels of English language support and eligibility for exemption from writing courses are appropriate. With this in mind, the researchers sought answers to (1) whether IELTS scores can predict students' academic achievement, (2) the extent to which instructors considered the established cut-off scores for admission and placement to be appropriate, and (3) what students feel about the test and its ability to place them appropriately.

This section is divided into two parts. The first relates to the question of predictive validity and IELTS, while the second focuses on appropriateness of cut-off scores and IELTS as a placement tool. The following discussion situates our findings within existing theories and offers explanations for the findings.

5.1 Predictive validity and IELTS

First, it must be reiterated that IELTS has made clear that the band scores are "a reflection of English language proficiency alone and not predictors of academic success or failure" (UCLES, 1999b, p 8). Our study's findings revealed mostly low with a few moderate correlations between IELTS scores and GPAs and course grades. The following offers some explanations as to why there was a lack of statistically significant positive correlations between IELTS scores and academic achievement measured in terms of GPA and course grade.

5.1.1 Consistent results with other studies

The majority of studies have shown weak correlations between IELTS and academic achievement (e.g. Gibson and Rusek, 1992 cited in Kerstjens and Nery, 2000; Fiocco, 1992). One exception was the study conducted by Bellingham (1993) which revealed a moderate correlation between overall IELTS scores and academic averages. However, it needs to be pointed out that this study was exceptional in the sense that it included subjects whose overall scores were below the band 6. Thus, it has been suggested that "lower levels of proficiency are stronger predictors of academic outcomes, and that at higher levels English proficiency ceases to be a significant factor in determining academic success" (Cotton and Conrow, 1998, p 76). In fact, Ferguson and White's study (1993) revealed that the predictive validity of IELTS is higher when the scores are lower.

Concerning language proficiency and its correlation with academic achievement, Davies and Criper's (1988) study concluded that language proficiency contributes about 10% to academic outcomes – a correlation of about 0.30. Though our study had correlations lower than 0.30 in many cases, the findings revealed a correlation of around 0.30 for academic outcomes (course grades and GPAs) with the sub-skill of reading and the overall IELTS score in both the ELI and RHET courses.

Furthermore, concerning the slightly higher correlations with the sub-skill of reading and academic achievement found in this study, similar results were also found by Cotton and Conrow (1998) and Dooey and Oliver (2002), who concluded that the scores of the reading component were the most effective in predicting academic performance.

Contrary to expectations, the researchers found almost no meaningful relationship between IELTS writing scores and grades. Because the ELI courses use impromptu, timed writing tasks as summative assessment, it was expected that there would be higher correlations between the variables. Determining whether the lack of correlation is due to such explanations as the amount of time allowed for writing tasks (students in the ELI have over an hour to craft a response), a mismatch in the criteria used to evaluate the writing product, or increased ability as a result of a semester's worth of instruction, requires additional investigation.

Certainly, in the RHET courses, the lack of correlation can be explained by the ways in which students are evaluated and given opportunities to incorporate feedback into their writing to produce, over several drafts, writing that conforms to the evaluative criteria of the course. This is certainly reflected in Table 12, which shows the majority of students passing the course with grades of at least a B.

5.1.2 GPA as a measure of academic achievement

The lack of correlation between test scores and academic achievement in this study may have been due to the measures of 'academic achievement' used. Though, like the researchers in this study, previous researchers have used grade point average (GPA) as a measure, some have used the GPA from the first semester (e.g. Bellingham, 1993), while others have used the GPA from the second semester (e.g. Gibson and Rusek, 1992 cited in Kerstjens and Nery, 2000). In addition, doubts as to the validity of using GPAs as a measurement of academic achievement have been voiced "as these can be calculated over different periods of time and over different number of examinations" (Cotton and Conrow, 1998). This can be seen in our findings, as the highest statistically significant correlation between IELTS and GPA was 0.29 (RHET 102 course – First Semester and Overall GPA and IELTS Reading). Thus, it is advised to use more than one measure of academic achievement when conducting predictive validity studies (Jochem et al., 1996).

While this study attempted to use a number of outcomes (ELI scores or RHET grades, course outcomes, first semester GPA, and overall GPA), the lack of correlation strongly suggests that students' achievement is based much more on other factors (e.g. effort exerted, academic preparedness) than on language proficiency, as measured by IELTS scores. In addition, it must be considered that tests such as IELTS are one-shot opportunities, whereas course grades reflect a number of opportunities to demonstrate abilities throughout a semester.

5.1.3 The interaction of proficiency with other variables

Though it is clear that, with regard to academic performance of international (or non-native speaking) students, language proficiency plays an important role with evidence that those who achieve higher scores on a standardised English test are more likely to succeed academically (Tonkyn, 1995), "English proficiency is only one among many factors that affect academic success" (Graham, 1987). This point was also brought up by the administrators in our study who mentioned factors such as motivation and study skills.

Indeed, concerning the limitations of language proficiency to predict academic achievement or success, Chalhoub-Deville and Turner (2000, p 537) have suggested that in making admissions decisions, in addition to the information about potential students' language ability, other student variables, such as past academic performance, local test results and previous experience, need also to be examined. The dependability of admissions decisions can be increased through looking at "how language ability, individual factors, and academic requirements fit together".

5.1.4 Time differences between measures

One explanation as to the lack of correlation between IELTS and academic achievement could be the length of time that had elapsed between the students' measurement of language proficiency in terms of his/her taking the IELTS exam and the measurement of academic achievement. It is understood that if a certain length of time had elapsed between the two measurements, then a multiplicity of intervening variables could have led to increased or decreased language proficiency of the student. If future investigations are carried out at the university, investigators would be advised to take this factor into consideration, which the current study did not, as the validity period of IELTS scores at the university is two years.

5.2 IELTS as placement tool

5.2.1 The determining of cut-off scores and placement

As Dooev and Oliver (2002) rightly point out, though it is necessary to establish cut-off points when making decisions about students, "a certain amount of flexibility should be exercised". The reason behind this is that in their study they found with determining a minimum cutoff score for admissions into a higher education institution, "a high IELTS score certainly did not equate to success" (p 51). Our study's findings also revealed that students with low scores in IELTS had the potential to succeed academically as determined by the outcomes in their courses. Even with an overall IELTS score of 5 (the lowest score for placement into ELI 98), the probability to pass the courses was shown to be 0.89 (65 out of 73 students). In addition, about half of the students entering ELI 100 with IELTS scores who were considered stronger (and possibly able to enter the RHET 101 course) had writing scores of 6.5, and as the

cut-off point for entry into ELI 100 is a writing score of 6-6.5 and for RHET 101 it is a score of 7, this lends support to the advice to be flexible. With a score of 6.5, many students were perceived by their instructors as able to succeed in a higher course level.

5.2.2 Stakeholder perceptions of fairness and placement appropriacy of IELTS

Despite the difficulty of interpreting them, the responses from the student questionnaires and the interviews conducted with the administrators provided some very useful insights. The general view held by the administrators was that non-linguistic factors affected academic achievement, which is in line with the views of other researchers (e.g. Graham, 1987). This view is also supported with student questionnaire data in that students generally believed themselves to be appropriately placed but still felt they needed to work hard to succeed in their courses.

As for the students' responses to the questionnaires, it has been suggested by Pollitt (1988 cited in Cotton and Conrow, 1998) that reliably obtained data on student self-assessment could provide the most predictive validity. While the current study did not establish that students' perceptions of their abilities were sufficient for placement (and did not intend to), self-assessment seems to be a factor in students' "self-placement" in the RHET 101 course, perhaps in recognition of the fact that language ability was not as important a factor in success in RHET courses as other factors, such as time and effort exerted.

Interestingly, most of the students surveyed viewed IELTS as being a 'fair' test even when they had been placed in lower level ELI courses. Despite the perception of fairness, the fact that several students believed that the university should introduce its own placement test was revealing. Although they have the largest stake in testing, students' perceptions of tests have been somewhat neglected (Hamp-Lyons, 2000). However, this study demonstrates that students can provide interesting insight into their actual perceptions of tests rather than what teachers believe their perceptions are (Wall, 2005). Thus, in our context, some AUC students and faculty see IELTS as being insufficient for placement, which is in fact consistent with Green and Weir's (2000) and Kokhan's (2013) view that not all proficiency tests are suitable as placement tools for language-related classes.

Again, though IELTS was perceived as a 'fair' test, doubts concerning IELTS use for placement can be seen with the responses by the students. Most students placed with IELTS into courses generally believed their language ability to be equal to, if not better than, their fellow students in the class, with only 3.4% perceiving themselves as weaker than other students in overall language ability. On the other hand, around 20% of all students placed with IELTS believed that they needed to spend more time and effort in their courses than the other students. However, the pass rates at each level were quite high, with the exception of ELI 99, indicating again that language proficiency alone seems not to be a major contributing factor to academic success for the students entering with IELTS, especially in the RHET courses.

5.3 Limitations

As with previous studies investigating the predictive validity of an English language proficiency test, the sample is necessarily truncated, as students whose test scores are too low for admission cannot be included in the study. This is the case for the current study as well, and it cannot be known how students placed in English language courses (ELI) would have performed if fully admitted. However, given the fact that most predictive validity research indicates that some level of language proficiency is clearly necessary for full-time study in an English-medium institution, it is likely that most students would not have been successful if, instead of taking an intensive English course, they took credit-bearing courses with little to no language support. This is likely to be especially true in the context of undergraduate studies at AUC, as most undergraduate students lack the academic experiences that their postgraduate counterparts bring to their studies.

A further limitation of the study was the inability to match students' perceptions of the IELTS test with their test scores and course outcomes to better illuminate the relationships between 'success' on a test and perceptions of that test. In addition, while comments of students to the questionnaire were illuminating for the ELI and RHET departments, they were less helpful in shedding light on the appropriateness and fairness of the IELTS test.

A final limitation concerns cases that were excluded from the study or not investigated further as a result of students withdrawing from their courses. Students in the ELI who withdrew were removed from the study completely, while those who withdrew from RHET courses were not evaluated by instructors and did not have the opportunity to respond to the student questionnaire. There are many reasons why a student might withdraw from a specific class or from the university, but it was not possible to further investigate the issue of students who withdrew due to concerns with the privacy of student records. Whether or not students withdrew as a result of difficulties they faced by being (or perceiving themselves to be) insufficiently prepared for their course of study could not be discerned without violating the university's policy on the privacy of student records.

5.4 Conclusions and recommendations

This study found that, overall, the use of IELTS for admission and the cut-off scores established for admission are appropriate and fair, according to academic outcomes, instructor evaluations and student perceptions. However, the cut-off scores used for placement in RHET courses is somewhat problematic, which is likely due, at least in part, to the lack of alignment between the writing section of the test and the curricula of the two courses, particularly RHET 102. Given the fact that many students 'self-place' by registering for RHET 101 when they placed into RHET 102, it is possible that students themselves are aware of this misalignment or have been advised by faculty or staff aware of the misalignment.

Failure rates in RHET courses were very low, with about 3% of students entering either 101 or 102 failing, while the majority of students in both levels passed with at least a B or 3.0 (83% and 74%, respectively).

In addition, the fact that many of the students in ELI 100, who are evaluated by their instructors to be placed too low, have borderline writing scores provides support for the advice given by testing organisations not to use "rigid cut-off scores and to consider all sub-scores". Although a supplementary writing test is already in use at the university, it is offered only to students who have demonstrated a certain level of proficiency (as measured in test scores) in listening, reading and speaking. The university may want to consider expanding the use of this writing test for all students placing into ELI 100.

While certainly not catastrophic, the failure rate of students in the ELI levels of 98 and 99 is of some cause for concern. Would using different cut-off scores or employing a cut-off score for the reading sub-test minimise the misplacements identified by instructors and the failures of students, particularly in the lower levels of the ELI? Or would an internal placement test provide useful information that could better support such students? Certainly, more investigation is needed to determine this.

This study did not find a strong relationship between IELTS scores and academic outcomes. However, given that the largest and most significant correlations between test scores and academic success were with the reading sub-test, further investigation into instituting minimum reading scores is warranted, especially as reading is perceived by faculty to be a vital skill in academic success.

In terms of placement in ELI courses, student outcomes suggest that the cut-offs are fair for ELI 100 (with the exception of some students who had borderline writing scores). However, given the failure rates in ELI 98 and 99, which were 11% and 20%, respectively), a closer look at instituting minimum sub-test scores is certainly needed. The impact on students would have to be carefully considered before instituting such a policy, however. On the other hand, the fact that many students skip one or more levels may provide further evidence that students' gains in language proficiency are heavily dependent on other factors (e.g., motivation, effort, academic or language learning background) and that language proficiency is a small, albeit necessary, contributor to success.

Students' perceptions of IELTS were fairly positive: students felt that the test was fair and more students considered their placement fair than did not. Many of the negative perceptions seemed to be linked to university policies (e.g., what kind of evidence of language proficiency would be accepted or the established cut-off scores). Like Cotton and Conrow (1998), this study found that students found the IELTS test fair, and that many faculty members were not as well-informed about the test as they might need to be. There is clearly a need at this university to better educate stakeholders about what a language proficiency test can be expected to do and what test scores mean in terms of real ability.

In conclusion, the IELTS exam seems to be both relevant and useful for making decisions about admission at the American University in Cairo, according to Bachman's (2005) assessment use argument. However, the extent to which it is sufficient for the other decisions the university would like to make—those related to placement—based on scores from it and the extent to which negative consequences (e.g. misplacements and failures due to insufficient language proficiency) are minimised was not established in this study.

While, for the most part, the IELTS cut-off scores that have been established do represent levels of language proficiency that seem to be sufficient for study at each course level, they do not hold a high level of predictive value in that the scores can generally predict whether or not a student will be successful, but not the extent or degree of that success. Future research must concentrate on better clarifying the roles of language proficiency and academic preparedness in academic success, as well as on the use of English language proficiency tests for placement in language support programs, especially at institutions in non-English-speaking countries.

ACKNOWLEDGEMENTS

We would like to express thanks to the IELTS partners for their support, as well as the respondents and interviewees for giving their time to participate in this research.

REFERENCES

Arrigoni, E, 1998, 'Students writing across the disciplines: professors' expectations and reactions according to discipline type', unpublished MA dissertation, The American University in Cairo

Arrigoni, E, 2010, 'Investigating the use of English language proficiency tests for decision-making purposes in English-medium universities in Egypt', unpublished raw data

Bachman, L, 2005, 'Building and supporting a case for test use', *Language Assessment Quarterly*, vol 2, pp 1–34

Banerjee, J, 2003, 'Interpreting and using proficiency test scores', unpublished PhD dissertation, Lancaster University

Bellingham, L, 1993, 'The relationship of language proficiency to academic success for international students', *New Zealand Journal of Educational Studies*, vol 30, pp 229–232

Boraie, D, Arrigoni, E, and Moos, J, 2013, 'Assessing Language Proficiency at English-Medium Universities in Arabic-Speaking Countries', manuscript submitted for publication

Breeze, R and Miller, P, 2011, 'Predictive validity of the IELTS Listening Test as an indicator of student coping ability in Spain', *IELTS Research Report Volume 12*, IDP: IELTS Australia, Canberra and British Council, London, pp 1–34

Chalhoub-Deville, M and Turner, C, 2000, 'What to look for in ESL admission tests: Cambridge certificate exams, IELTS and TOEFL', *System*, vol 28, pp 523–539

Coleman, D, Starfield, S and Hagan, A, 2003, 'Stakeholder perceptions of the IELTS test in three countries', *IELTS Research Reports Volume 5*, IELTS Australia, Canberra, pp 159–235

Cotton, F and Conrow, F, 1998, 'An investigation of the predictive validity of IELTS amongst a group of international students studying at the University of Tasmania', *IELTS Research Report Volume 1*, IELTS Australia Pty Ltd, Canberra, pp 72–115

Criper, C and Davies, A, 1988, 'ELTS validation project report 1(1)', British Council and University of Cambridge Local Examinations Syndicate, London

Dooey, P and Oliver, R, 2002, 'An investigation into the predictive validity of the IELTS test as an indicator of future academic success', *Prospect*, vol 17, pp 36–54

Elder, C, 1993, 'Language proficiency as a predictor of language performance in teacher education', *Melbourne Papers in Language Testing*, vol 2, pp 68–87

Elder, C and O'Loughlin, K, 2003, 'Investigating the relationship between intensive English language instruction and bad score gain on IELTS', *IELTS Research Report Volume 4*, ed R Tulloh, IELTS Australia Pty Ltd, Canberra, pp 153–206

ETS, (n.d.), 'Mapping TOEFL® iBT on the Common European Framework of Reference', accessed at: http://www.ets.org/Media/Research/pdf/CEF_Mapping_ Study_Interim_Report.pdf

Feast, V, 2002, 'The impact of IELTS scores on performance at university', *International Education Journal*, vol 3, pp 70–85

Ferguson, G and White, E, 1993, 'A Predictive Validity Study of IELTS', *Report Commissioned by UCLES*, Edinburgh: University of Edinburgh, Institute for Applied Language Studies

Fox, J, 2009, 'Moderating top-down policy impact and supporting EAP curricular renewal: Exploring the potential of diagnostic assessment', *Journal of English for Academic Purposes*, vol 8, pp 26–42

Gibson, C and Swan, A, 2008, 'The significance of sociolinguistic backgrounds of teachers of IELTS test preparation courses in selected Malaysian institutions', *IELTS Research Report Volume 8*, ed J Osborne, IELTS Australia Pty Ltd, Canberra, pp 45–144

Graham, JG, 1987, 'English language proficiency and the prediction of academic success', *TESOL Quarterly*, vol 21, pp 505–521

Green, A and Weir, C, 2002, 'Monitoring score gain on the IELTS Academic writing module in EAP programmes of varying duration', Phase 1 report, University of Cambridge Local Examinations Syndicate, Cambridge

Green, T, 2004, 'Making the grade: Score gains on the IELTS writing test', *Research Notes* vol 16, pp 9–13

Green, A, 2005, 'EAP study recommendations and score gains on the IELTS academic writing test', *Assessing Writing*, vol 10, pp 44–60

Green, A, 2007, 'Washback to learning outcomes: A comparative study of IELTS preparation and university pre-sessional language courses', *Assessment in Education*, vol 14, pp 75–97

Hamp-Lyons, L, 1997, 'Washback, impact and validity: Ethical concerns', *Language Testing*, vol 14, pp 295–303

Hamp-Lyons, L, 2000, 'Social, professional and individual responsibility in language testing', *System*, vol 28, pp 579–591

Hill, K, Storch, N and Lynch, B, 1999, 'A comparison of IELTS and TOEFL as predictors of academic success', *IELTS Research Report Volume 2*, IELTS Australia Pty Ltd, Canberra, pp 62–73

IELTS, 2009, 'Guide for Stakeholders', IELTS (University of Cambridge ESOL, British Council and IDP: IELTS Australia)

Johnson, P, 1988, 'English language proficiency and academic performance of undergraduate international students' *TESOL Quarterly*, vol 22, pp 164–168

Kerstjens, M and C Nery, 2000, 'Predictive validity in the IELTS test: a study of the relationship between IELTS scores and students' subsequent academic performance', *IELTS Research Report Volume 3*, IELTS Australia Pty Ltd, Canberra, pp 85–108

Kokhan, K, 2013, 'An argument against using standardized test scores for placement of international undergraduate students in English as a Second Language (ESL) courses', *Language Testing*, vol 30, pp 467–489

Light, R L, Xu, M and Mossop, J, 1987, 'English proficiency and academic performance of international students', *TESOL Quarterly*, vol 21, pp 251–261

O'Loughlin, K and Arkoudis, S, 2009, 'Investigating IELTS exit score gains in higher education', *IELTS Research Report Volume 10*, ed J Osborne, IELTS Australia Pty Ltd, Canberra and British Council, London, pp 95–180

O'Loughlin, K, 2008, 'The use of IELTS for university selection in Australia: a case study', *IELTS Research Report Volume 8*, ed J Osborne, IELTS Australia Pty Ltd, Canberra, pp 145–242

McDowall, C and Merrylees, B, 1998, 'Survey of receiving institutions' use and attitudes to IELTS', *IELTS Research Reports, Volume 1*, IELTS Australia Pty Limited, Canberra, pp 116–139

McNamara, T and Roever, C, 2006, Language testing: The social dimension, Blackwell Publishing, Oxford

Messick, S, 1989, 'Validity', in *Educational measurement*, ed R Linn, MacMillan, New York, pp 13–103

Morante, E, 1987, 'A primer on placement testing', in *New directions for community colleges: Issues in student assessment*, eds D Bray and M Belcher, Jossey-Bass, San Francisco, pp 55–63

Rea-Dickins, P, Kiely, R and Yu, G, 2007, 'Student identity, learning and progression (SILP): The affective and academic impact of IELTS on 'successful' candidates', *IELTS Research Report Volume 7*, IELTS Australia Pty Ltd, Canberra and British Council, London, pp 59–136

Rees, J, 1999, 'Counting the cost of international assessment: Why universities may need to get a second opinion', *Assessment and Evaluation in Higher Education*, vol 24, pp 427–438

Shohamy, E, 2008, 'Language policy and language assessment: the relationship', *Current Issues in Language Planning*, vol 9, pp 363–373

Smith, H and Haslett, S, 2007, 'Attitudes of tertiary key decision-makers towards English language test in Aotearoa New Zealand: Report on the results of a national provider survey', *IELTS Research Report Volume 7*, IELTS Australia Pty Ltd, Canberra and British Council, London, pp 137–204

Tonkyn, A, 1995, 'English language proficiency standards for overseas students: who needs what level?', *Journal of International Education*, vol 6, pp 37–61

UCLES, 2009, 'IELTS candidate performance in 2008', *Research Notes*, vol 36, pp 30–32

Vinke, AA and Jochems, WMG, 1993, 'English proficiency and academic success in international postgraduate education', *Higher Education*, vol 26, pp 275–285

Wait, I and Gressel, J, 2009, 'Relationship between TOEFL score and academic success for international engineering students', *Journal of Engineering Education*, vol 98, pp 389–398

Wall, D, 2005, *The impact of high-stakes examinations on classroom teaching*, Cambridge University Press, Cambridge

Weir, CJ, Hawkey, R Green, T, Devi, S and Unaldi, A, 2009, 'The relationship between the academic reading construct as measured by IELTS and the reading experiences of students in their first year of study at a British university', *IELTS Research Report Volume* 9, British Council and IELTS Australia, pp 97–156

Yen, D and Kuzma, J, 2009, 'Higher IELTS score, higher academic performance? The validity of IELTS in predicting the academic performance of Chinese students', *Worcester Journal of Learning and Teaching*, vol 3, pp 1–7