

Research Paper

Placing Students for Success: A Comparison of IELTS, Local, and Other Placement Methods for English for Academic Purposes Courses

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Abstract

While previous research on student success has focused on disciplinary academic classes and programs with varying results regarding the predictive validity of English proficiency tests, namely the International English Language Testing System (IELTS), none have studied student success within the non-program-specific context of an English for academic purposes (EAP) program in which the cut scores set by the university align with the IELTS guidance. Using data collected during the intake of new international students and at the completion of each semester, this study primarily sought to determine how students placed via IELTS fared compared to those placed via other tests, including the in-house English placement test (EPT), and whether they were more likely to fail EAP courses during their first semester. Across six semesters, success data for 663 English language learners (ELLS) enrolled in EAP courses during their first semester at the university were collected and compared on the basis of the placement test used, students' test scores, and their final course grades. Logistic regression analysis results revealed that the EPT performed significantly better in placing students into level-appropriate courses than IELTS. The findings indicate the predictive value of the in-house EPT process and suggest further research into semester-to-semester variations, emergent placement methods, and the probability of seeking services to mitigate academic challenges.

Introduction

Accurately assessing the language ability of prospective students is key to allowing post-secondary institutions to make wise placement decisions that positively impact student success. The popularity of one English language proficiency test, the International English Language Testing System (IELTS), is undeniable with many prospective students submitting IELTS scores to gain college and university admission. This trend has been bolstered by Immigration, Refugees and Citizenship Canada's decision in June 2018 to implement a "Student Direct Stream" to allow for expedited processing of study permits for applicants who meet certain requirements, including an IELTS "academic or general training score of 6.0 or higher in each skill (reading, writing, speaking and listening)" (Government of Canada, 2021). Thompson Rivers University (TRU), a medium-sized public university in British Columbia, has experienced this growth firsthand.

The TRU website states the following requirements for international students who are applying for admission:

Applicants are required to meet minimum English language proficiency requirements for direct entry into academic programs. Students may meet this condition by either

providing an acceptable English language proficiency test score (Test of English as a Foreign Language (TOEFL), IELTS, etc.) or by achieving an acceptable score on the TRU English Placement Test (EPT). (TRU, n.d.b)

Students are also placed into English for Academic Purposes (EAP) courses based on either their English language proficiency test scores (IELTS, etc.) or their TRU EPT scores which include “a set of computer-adaptive, untimed tests” assessing Accuplacer grammar, reading skills and sentence meaning, and in-house remarking of their writing samples as well as oral interviews (College Board, 2009, para. 4). The number of students placed via IELTS scores as opposed to the TRU EPT has steadily increased over the years.

A concern shared by members of the English Language Learning & Teaching (ELLT) Department is that students placed according to their IELTS scores may lack the necessary pre-requisite skills to succeed in their assigned EAP courses. This unease stems from the observation that, in some cases, IELTS scores allow students to take courses that are one, two, or even three levels higher than their EPT scores would have allowed. Students who are assessed on both EPT and IELTS are placed according to whichever test yields the highest placement. This situation raises the question: Do these students have adequate English language preparation to pass the course levels into which their IELTS scores place them or are they being set up to fail?

Concerns over language proficiency tests, namely IELTS, have prompted extensive investigation with numerous articles on the predictive efficacy of IELTS in the context of disciplinary academic courses and programs at post-secondary institutions in Australia (e.g., Cotton & Conrow, 1998; Dooley & Oliver, 2002; Feast, 2002; Woodrow, 2006), the United Kingdom (UK) (e.g., Dang & Dang, 2021; Hu & Trenkic, 2019; Thorpe et al., 2017; Yen & Kuzma, 2009), and the United Arab Emirates (UAE) (e.g., Schoepp & Garinger, 2016; Schoepp, 2018), as well as cross-locational or broad literature reviews (e.g., MacDonald, 2019; Murray, 2015, 2018; Pilcher & Richards, 2017; Stigger, 2019).

This literature raises questions about the appropriateness of the cut-scores set by universities for admission into programs (e.g., Feast, 2002; Hu & Trenkic, 2019; MacDonald, 2019; Murray, 2015, 2018; Schoepp, 2018; Thorpe et al., 2017; Woodrow, 2006), concerns about test fraud (e.g., Hu & Trenkic, 2019; MacDonald, 2019; Murray, 2015, 2018), and concerns about score inflation due to curriculum-narrowing practices or repeated test taking (Hu & Trenkic, 2019). The vast amount of research on the IELTS test indicates that concerns regarding its use are widespread and varied.

The present research project contributes to the literature by studying student success within the non-program-specific context of an EAP program in which the cut-scores align with the guidance provided by IELTS (IELTS, 2019a), allowing for more focused examination. By comparing two methods of placement, this study can illuminate whether students who are placed with one method rather than the other are more likely to fail thus identifying students who may need further support and contributing to EAP professionals’ consideration of the efficacy of placement testing options.

Literature Review

Previous research concerning the predictive validity of IELTS has delved into the success of non-native English speakers (NNES) in either their first semester or their first year of an academic program at various universities around the world, and the findings from these studies have been mixed. For example, Woodrow (2006) found a moderate level of predictive power after examining the academic performance of 62 international students who gained admittance to a post-graduate university program in Australia via their IELTS scores. Likewise, there was a moderately significant level of correlation in Yen and Kuzma's (2009) study of 61 Chinese business students attending a university in the UK. As well, Dang and Dang (2021) investigated 80 Vietnamese students studying in academic disciplines at 31 UK post-secondary institutions and found that "these students' IELTS scores moderately correlated with their academic results" (p. 13).

However, several studies resulted in stronger affirmation that IELTS scores predict academic performance, at least to some extent. Schoepp and Garinger's (2016) review of 241 undergraduate students enrolled at a UAE university revealed a strong link for IELTS scores of 7.0 and higher but a weaker link for IELTS scores of 6.0 and 6.5. Schoepp (2018) found "statistically significant correlations between overall IELTS score and all measures of GPA" after analyzing 953 NNES students enrolled in a bachelor's degree program in the UAE (p. 281); however, unlike the university programs featured in many other studies, the first year and a half of this bachelor's degree program consisted of "very prescriptive general education" courses and the minimum requirement for admission was exceptionally low: an IELTS score of 5.0 (p. 273). Lastly, Hu and Trenkic (2019) analyzed 153 Chinese students enrolled in a master's degree program at a UK university and also found a strong correlation but noted that the correlation was stronger for the more linguistically demanding programs than for the less linguistically demanding programs.

In contrast, other studies found that IELTS scores were either not connected or only weakly connected with academic performance. Cotton and Conrow (1998) analyzed three different measures of academic outcomes and a sample of 33 international students studying in a variety of undergraduate or graduate disciplines during their first year at an Australian university and did not find any significant correlations for the overall IELTS scores but did find "weak correlations between the reading and writing subtest scores" for both the faculty and student ratings of academic performance (p. 109). Similarly, a study by Dooley and Oliver (2002) of 65 students enrolled in the business, science, and engineering programs at an Australian university found that only the IELTS reading module significantly predicted academic success while the other IELTS modules did not. Feast's (2002) investigation of 101 undergraduate and graduate NNES attending an Australian university resulted in "a significant and positive, but weak, relationship between English language proficiency . . . and their performance" (p. 83). Finally, a study involving a UK post-secondary institution with a sample of 611 undergraduate and 245 post-graduate NNES found a correlation between IELTS scores and academic performance in the case of undergraduate students, but not in the case of post-graduate students (Thorpe et al., 2017). Although all of the above studies focused on international students during their first post-secondary courses at English medium institutions, the sample sizes, contexts, and results varied greatly.

A common notion in the current literature is that using an English proficiency test that focuses on general English to assess the readiness of NNES to study in discipline-specific academic programs is inappropriate. In fact, Stigger (2019) postulated that the incongruity between the decontextualized language used in IELTS and the contextualized language used in academic disciplines might be responsible for the inconsistent findings regarding the predictive validity of IELTS. Furthermore, Murray (2018) argued:

Tests such as IELTS and TOEFL do not—and do not claim to—assess test-takers’ conversancy in the particular academic literacies of their future disciplines, and this is likely why students who meet even more rigorous English language entry conditions will often still struggle subsequently with course work. (p. 19)

Similarly, Pilcher and Richards (2017) asserted that post-secondary institutions are “entrusting too much power to a test that assesses its own [sic] individual, subjective type of ‘English’, which differs from the ‘English’ students need to succeed” in discipline-specific contexts (p. 12). In essence, these, and other, researchers have questioned the broad-scale use of a test that claims to measure “English language proficiency needed for an academic, higher education environment” but does not actually include the types of tasks and language that are predominant in undergraduate and graduate academic programs (IELTS, 2019b, p. 4).

Another prevalent argument is that there is a mismatch between the cut scores set by many universities and the recommendations made by IELTS. According to the guidance IELTS provides universities to help them determine institutional and program entry requirements, for “linguistically demanding academic courses,” scores in the range of 7.5 to 9.0 are acceptable while 7.0 is “probably acceptable;” in the case of “linguistically less demanding academic courses,” scores in the range of 7.0 to 9.0 are acceptable while 6.5 is “probably acceptable” (IELTS, 2019a, p. 15). However, published research has revealed that numerous universities in the UK, Australia, and UAE had minimum entry requirements that fall below the suggested cut scores and did not take into account the linguistic demands of various programs and disciplines (e.g., Feast, 2002; Schoepp, 2018; Thorpe et al., 2017; Woodrow, 2006). The situation is similar in Canada, where 6.5 is the common minimum entry score for undergraduate admission to post-secondary institutions irrespective of the linguistic demand of the courses or program (MacDonald, 2019, p. 165). Several studies (e.g., MacDonald, 2019; Murray, 2015, 2018; Thorpe et al., 2017; Woodrow, 2006) identified the same key factor, which MacDonald (2019) described as “the influence of market conformity and economic pressures,” that prompts universities to set lower entry requirements than the IELTS recommendations (p. 166). Indeed, Feast (2002), MacDonald (2019), and Schoepp (2018), among others, mentioned that some universities stand to experience “unacceptably high losses of international students” by raising their IELTS entry thresholds (Feast, 2002, p. 84). The discrepancy between the IELTS guidelines and the cut-scores set by many institutions raises an important ethical consideration regarding whether these institutions are creating a situation that undermines student success. Hu and Trenkic (2019) succinctly explained the crux of this concern:

International students accept their offers in good faith, believing that if the university has accepted their qualifications, their English skills must be good enough to allow them to fulfil their academic potential. For those who find out that their English is not strong

enough to allow them to learn and perform at the true level of their ability, this risks jeopardising their educational experience, their mental health and wellbeing, and their future employment prospects. (p. 22)

In order to address the mismatch and better serve students, recommendations range from raising the entry requirements to account for the linguistic demands of the program (e.g., Feast, 2002; Hu & Trenkic, 2019; Schoepp, 2018) to offering NNES in-session support to help them develop academic literacies, acclimate to the academic environment, and bolster their language proficiency (e.g., Dang & Dang, 2021; MacDonald, 2019; Murray, 2018; Stigger, 2019).

This project differs in several ways from other research on this topic and thus fills a gap in the literature. First, whereas other studies featured Australian, UK, or UAE universities, this project features a Canadian university. Second, this study considered a distinct perspective by comparing the efficacy of two different English proficiency tests in placing English language learners (ELLs) into appropriate courses: IELTS and the TRU EPT. Another way in which this project contributes to research is by featuring a setting that had not been explored: IELTS students' success in an EAP program. According to Woodrow (2006), "There is . . . a need for continuing predictive validity studies that take into account specific settings" (p. 52). While other studies explored student success in academic university programs, the present study explored student success in a program designed to prepare EAP students for a variety of academic disciplines.

Furthermore, unlike several other studies, the sample size used in this project was large and homogeneous, aligning with the recommendation by Cotton and Conrow (1998). The sample included 319 ELLs placed into EAP courses, rather than various academic disciplines, via their IELTS scores. Finally, compared to many university programs analyzed in the published studies, the EAP program featured in this study does not contradict IELTS's "Guidelines for educational institutions" (IELTS, n.d.b) and more directly aligns with the non-discipline-specific English used in IELTS. A more direct correlation between students' scores and their performance in the EAP program is expected since there is no requirement for these students to have specialized disciplinary knowledge to succeed in their EAP courses.

The present study addressed the following research questions with English language proficiency test and EAP success data from students across six semesters:

1. What were the success rates of new students placed into EAP courses via the TRU EPT, the IELTS test, and other placement methods?
2. How many students who had taken the TRU EPT were placed into higher course levels as a result of their IELTS scores, and how did they perform in those courses?
3. Were the students placed according to their IELTS scores more likely to fail their EAP courses during their first semester than those placed according to the TRU EPT?
4. Did the students who had higher IELTS overall band scores than required have a greater success rate than those whose overall band scores met the requirements for the EAP program level in which they were placed?

The Study

The EAP program that was the focus of this study consists of five levels, ranging from beginner to advanced, of skill-based EAP courses, namely reading, writing, oral communication, and grammar. Normally, ELLs can complete a level in one semester. Level one, two, and three students take five EAP courses per semester. In level four, students can take one discipline-specific academic course in addition to four EAP courses while level five students can take an additional three courses along with two core EAP courses.

This study relied on data that are routinely collected during the intake of new international students and at the completion of each semester. Data were collected over a period of six semesters from Fall 2018 to Fall 2020. At the beginning of each semester, ELLs enrolled in EAP courses during their first semester at the institution were identified. This information, as well as the placement method used and students' test scores, was compiled along with the final grades and the courses which students did not successfully complete. Subsequently, the success rates of students placed via different placement methods were compared. Ethics approval was granted prior to the commencement of data collection and was renewed in subsequent years.

Design

First semester of enrollment and placement method served as the two independent variables for this project. The rationale for examining students' performance during their first semester of studies at TRU was twofold. First, Yen and Kuzma (2009) found IELTS scores were better able to predict academic outcomes in the first semester, suggesting a stronger correlation would be found between students' IELTS scores and their success rate in EAP courses during their first semester at TRU than in subsequent semesters. Second, the focus on students' first semester was intended to control for additional student performance factors, such as the effects of grades in the previous semester and increases in English proficiency through further instruction.

The main placement methods studied in this research project were the IELTS test, labelled as IELTS, and the TRU EPT, labelled as EPT. For students whose EPT placement matched their IELTS placement, the placement method was labelled as "EPT = IELTS." Although this study primarily compared IELTS placements to EPT placements, the data set included "other" placements, such as pathway programs, TOEFL, other English proficiency tests, including the Pearson Test of English (PTE) and Duolingo, and unspecified placements where not noted in the ISP Database, the international student management software. These equivalency tests are posted on the TRU website (n.d.c).

Meanwhile, the dependent variable was success in the assigned EAP course. In the TRU EAP program, students need to earn a C+ (65%) in order to successfully complete a course. As such, a grade below a C+ (65%), as well as not completing a course (i.e., a Did Not Complete (DNC)), was counted as a failure, and a final grade equal to or greater than a C+ was counted as a success. If a student withdrew from a course prior to the institutional withdrawal date (i.e., up to eight weeks in a one semester course), the course was removed from the data (TRU, 2016).

Procedure

The analyzed student data were routinely collected during the intake process, and, as such, nothing additional was collected from the participants. Students with IELTS scores request their IELTS testing agency send their official test scores directly to TRU Admissions. Upon receiving the test scores from the testing agency, TRU Admissions staff input them into the ISP Database. International student advisors compile a list of students who plan to take the in-house EPT upon arrival at TRU. The other students are placed according to their IELTS scores. An ELLT faculty member creates an EAP intake spreadsheet and adds the names and ID numbers, which are provided by the TRU Assessment Centre, of the students who are writing the EPT and, if necessary, accesses the ISP Database to verify any IELTS scores missing from the spreadsheet. After the students with IELTS scores who have chosen to take the in-house EPT have completed the EPT, ELLT faculty members enter their scores and placement results into the EAP Intake spreadsheet. Students' grades for EAP courses (the pass/fail list in this study) are recorded by the Registrar's Office and provided to the ELLT Department so faculty can use this list to ensure that the students registered in their courses have met the prerequisites.

In order to identify students placed directly via their IELTS scores and to filter out returning students, my research assistants and I relied on spreadsheets generated from the ISP Database and cross-referenced them with the EAP intake spreadsheet. The raw data were organized into separate spreadsheets for each semester under review, and information was added as it became available. After the completion of the final semester of this study, we collated the data from each semester into one MS Excel document and removed identifiers to make the data set anonymous. Finally, the data were summarized and analyzed to determine whether students placed through IELTS were more likely to fail than those placed through the TRU EPT. As a further means of comparison, students placed via other methods were also included in some data sets.

The TRU EPT, which serves as the comparison to IELTS, is a multistep process that relies on ELLT faculty involvement. First, students complete the computer adaptive reading skills, sentence meaning, and language use components of the College Board Accuplacer English as a second language (ESL) test, which are electronically scored. Then students complete the timed writing component of Accuplacer by responding to a prompt that is assessed by at least two ELLT faculty members. Next, faculty members interview students to assess their speaking and listening skills. Finally, small groups of ELLT faculty determine EAP course placements by carefully considering all of the assessment results, and then faculty meet one-on-one with students to share their results and assigned courses. Accuplacer scores are combined with faculty-based assessment to determine students' placement into skill-based EAP courses in one of six levels. Level one to three students are enrolled strictly in EAP courses while level four and five students can take some discipline-specific academic courses concurrently. The sixth level is sufficient for direct entry, and thus these students are not in the EAP program or in this dataset. Where there are jagged scores with one skill area being stronger than another, faculty input is key to determining the placement.

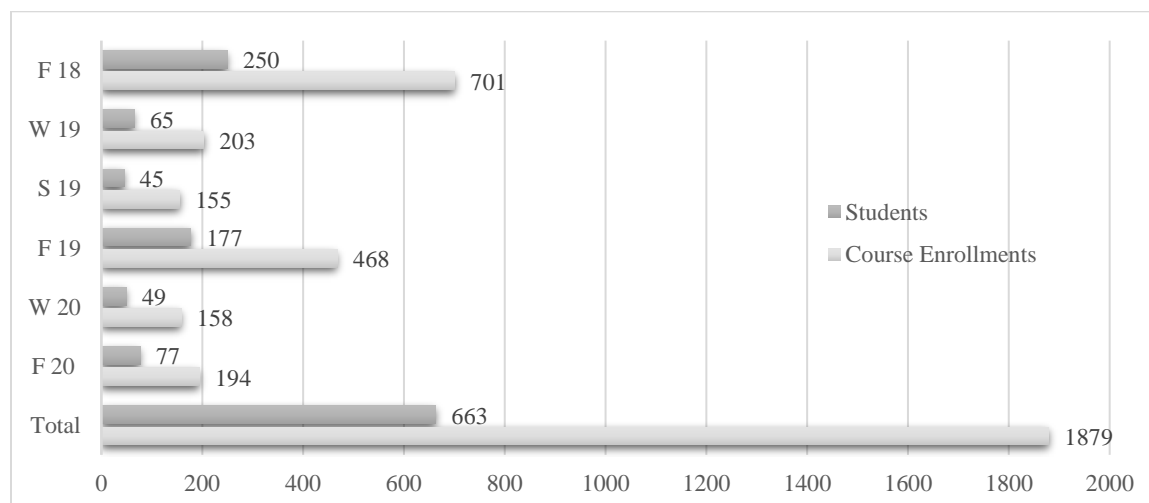
Participants

This research project focused on students enrolled in at least one EAP course during their first semester of study at TRU. Returning students, defined as those who have previously taken courses at the institution, and students who gained direct entry into academic courses were not included in this project. In addition, students placed into strictly level one and/or two EAP courses were excluded in order for the control group (i.e., students placed via EPT) to more closely match the test group (i.e., students placed via IELTS). Students placed into level three or above, or into a blend of level two and three EAP courses were included in this study. The majority of the students in this study were international, but some domestic students who were ELLs were also included. Though the exact proportion of international to domestic students included in this study is difficult to ascertain based on the available information, according to the TRU Integrated Planning and Effectiveness course enrollment reports for the winter and fall semesters from 2018 to 2020, international students represented approximately 92% of all course enrollments in the TRU EAP program while domestic students represented approximately 8% (Institutional Planning & Effectiveness, n.d.; Institutional Planning & Effectiveness, 2020). To protect the anonymity of the participants, identifiers, such as their name, student ID number, gender, and nationality, were removed from the final data set.

This study relied on student data that are normally collected during the intake process, making it possible to have a relatively large sample size. Initially, the number of participants was 694. However, 17 students were removed due to a variety of placement discrepancies which resulted in them enrolling in courses that differed from their placement method scores, such as a graduate program with a higher entrance score. Seven were removed after they withdrew from all of the EAP courses in which they were initially enrolled. A further seven students were removed as their first semester of study at TRU or placement method could not be confirmed, resulting in a final sample size of 663 students. These students represented a total of 1,879 EAP course enrollments spread out over the six semesters included in this study (see Figure 1).

Figure 1

Total Number of New ELLs and EAP Course Enrollments by Semester.



Analysis and Results

Analyses were completed using MS Excel, including the XLMiner Analysis ToolPak add-in. The results of this study are presented in response to each question posed. Prior to describing the analysis and results of each question, I articulate the rationale for the units of analysis and sampling.

Unit of Analysis

In this study, the case was defined as a course in which a student was enrolled since there is considerable variation in the number of courses students take each semester, with some students taking as many as five EAP courses and others taking only one. While the analyses were done for both the course as a case and for the student as a case, analyzing by students who passed all courses or failed at least one course, combined the students who failed one course with those who failed multiple courses, resulting in a less sensitive metric of student success. Thus, I report the data by course unit (each course that a student enrolled in) rather than by student. I used an alpha level of .05 for all statistical tests.

Addressing Sampling Implications of COVID-19

In order to control for the extraordinary circumstances generated by the pandemic, I removed the 2020 winter and fall semester data from the analyses entitled, “pre-COVID-19.” I also included all six semesters in several analyses as points of comparison. The COVID-19 pandemic struck during the final year of this research project, thus impacting the data in several ways. First, efforts to curb the spread of the virus resulted in an abrupt halt to face-to-face instruction in March 2020, resulting in a shift to alternate modes of instruction, namely online, for the last few weeks of the 2020 winter semester. This move to online teaching necessitated amendments to course outlines, such as weighting completed course work more heavily than originally indicated and eliminating the final exam. In addition, the university issued extraordinary provisions allowing students to withdraw from a 2020 winter semester course instead of receiving a failing grade (TRU Announcements, personal communication, April 3, 2020).

Furthermore, the continued suspension of face-to-face instruction affected the 2020 summer semester. TRU was not able to offer the EPT as face-to-face testing was not permitted. Therefore, all new international student applications for that semester were suspended, which meant that I was unable to collect any data during what was supposed to be the final semester of data collection. Finally, the pandemic continued to disrupt the 2020 fall semester. Due to travel restrictions, only two students were able to come in person to TRU to take the on-campus EPT. To address the void in COVID-safe testing options, Duolingo was added to the list of accepted English proficiency tests since it enables candidates to take the test from the purported safety of their own homes. Consequently, there was a shift in the number of placements made through the different methods. Moreover, courses were again delivered remotely to comply with province-wide restrictions.

What were the success rates of new students placed into EAP courses via the TRU EPT, the IELTS test, and other placement methods?

Table 1 presents a summary of EAP placements based on TRU EPT scores. To study the success rate, I analyzed the failure rate. A total of 177 students were placed into 682 EAP courses during the six semesters included in this study: Fall 2018, Winter 2019, Summer 2019, Fall 2019, Winter 2020, and Fall 2020. The failure rate for all semesters was 9.7%. Removing the pre-COVID-19 semesters resulted in a minimal decrease in the failure rate to 9.5%. There was considerable variability in the percentage of courses failed from semester to semester with the lowest percentage of course failures in the 2019 summer semester at 1.4% and the highest pre-COVID-19 failure rate in the 2018 fall semester at 12.1%. Although the 2020 fall semester actually had a much higher course failure rate than the 2018 fall semester, with a sample size of only two students enrolled in eight courses, the results for this semester were very different from the other semesters and occurred during pandemic times.

Table 1

TRU EPT Placements

Semester	Number of Students	Number of EAP Courses	Number of EAP Courses Failed	Percentage of Courses Failed
Fall 2018	68	282	34	12.1%
Winter 2019	22	83	6	7.2%
Summer 2019	19	74	1	1.4%
Fall 2019	52	179	18	10.1%
Winter 2020	14	56	3	5.4%
Fall 2020	2	8	4	50%
All 6 Semesters	177	682	66	9.7%
Pre-COVID-19	161	618	59	9.5%

The success rates of new ELLs placed into EAP courses via the IELTS test are presented in Table 2 (next page). In all six semesters combined, 319 students were placed into 885 EAP courses resulting in a 12.2% course failure rate. When the semesters that were affected by the COVID-19 pandemic were removed, the failure rate increased to 13.4%. Again, there was a relatively large degree of semester to semester variation. The lowest course failure rate, 4.6%, occurred in the 2020 winter semester while the highest course failure rate, 17.1%, occurred in the 2019 winter semester.

Table 3 (next page) presents a summary of all students whose placement via the on-campus EPT coincided with their placement via the IELTS test. The sample included a total of eight students in this category representing 24 course enrollments and an overall course failure rate of only 4.2%. However, the sample size was too small to make meaningful comparisons.

Table 2*IELTS Placements*

Semester	Number of Students	Number of EAP Courses	Number of EAP Courses Failed	Percentage of Courses Failed
Fall 2018	116	302	50	16.6%
Winter 2019	37	105	18	17.1%
Summer 2019	25	79	7	8.9%
Fall 2019	77	215	19	8.8%
Winter 2020	28	87	4	4.6%
Fall 2020	36	97	10	10.3%
All 6 Semesters	319	885	108	12.2%
Pre-COVID-19	255	701	94	13.4%

Table 3*EPT = IELTS Placements*

Semester	Number of Students	Number of EAP Courses	Number of EAP Courses Failed	Percentage of Courses Failed
Fall 2018	3	9	1	11.1%
Winter 2019	1	4	0	0%
Summer 2019	1	2	0	0%
Fall 2019	2	7	0	0%
Winter 2020	1	2	0	0%
Fall 2020	0	0	0	0%
All 6 Semesters	8	24	1	4.2%
Pre-COVID-19	7	22	1	4.5%

The success rates of the new ELLs placed into EAP courses via other placement methods, including pathway programs, TOEFL, PTE, Duolingo, other English proficiency tests, and unspecified placements, are presented in Table 4 (next page). Over the six semesters, 159 students completed a total of 288 courses with an overall failure rate of 22.2%. Removing the semesters affected by the pandemic, the 2020 winter and fall semesters, resulted in a drop in the failure rate to 15.1%. Prior to the pandemic, the semester with the highest failure rate, 17.6%, was the 2018 fall semester, and the semesters with the lowest failure rates were the 2019 winter and summer semesters, both 0%; however, only five students were placed in winter and none were placed in summer via other methods.

As seen in Figure 2 (next page), the fall semesters attracted the largest number of EAP course enrollments by new ELLs. Furthermore, IELTS placements consistently accounted for the most enrollments, followed closely by the on-campus EPT. The only semester that did not follow these patterns was the 2020 fall semester which, primarily due to pandemic travel restrictions, experienced an overall drop in enrollments, a substantial increase in other placement methods, namely Duolingo, and a considerable decrease in TRU EPT placements.

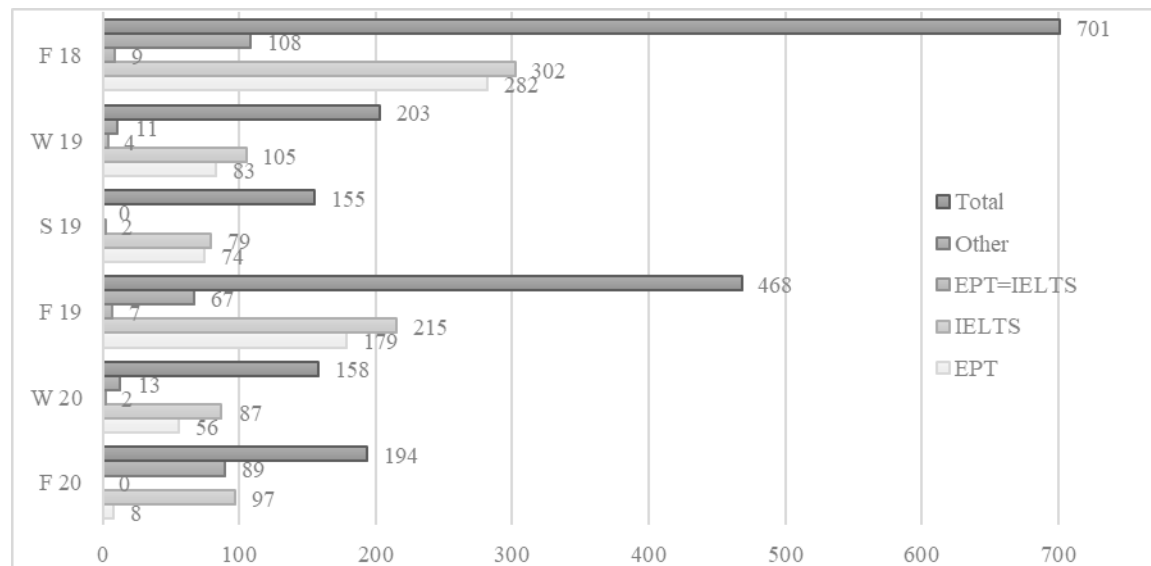
Table 4

Other Placement Methods

Semester	Number of Students	Number of EAP Courses	Number of EAP Courses Failed	Percentage of Courses Failed
Fall 2018	63	108	19	17.6%
Winter 2019	5	11	0	0%
Summer 2019	0	0	0	0%
Fall 2019	46	67	9	13.4%
Winter 2020	6	13	1	7.7%
Fall 2020	39	89	35	39.3%
All 6 Semesters	159	288	64	22.2%
Pre-COVID-19	114	186	28	15.1%

Figure 2

Total Number of EAP Courses New ELLs Took Each Semester by Placement Method



Overall, the average EAP program failure rate when all placement methods were combined was 12.7% for all six semesters (Figure 3, next page) and 11.9% when the two semesters affected by the pandemic were excluded (Figure 4, next page). On average, IELTS placements produced higher course failure rates than EPT placements did. For all six semesters combined, 12.2% of IELTS placements and 9.7% of EPT placements resulted in unsuccessful completion of a course. Removing the 2020 winter and fall semesters, increased the overall IELTS failure rate to 13.4% and marginally decreased the overall EPT failure rate to 9.5%. Other placement methods accounted for the highest failure rates for all six semesters, 22.2%, and for pre-COVID-19 semesters, 15.1%, while EPT placements that matched the IELTS placements accounted for the lowest course failure rates: 4.2% and 4.5% respectively.

Figure 3

Total Percentage of EAP Courses New ELLs Failed by Placement Method for All Six Semesters

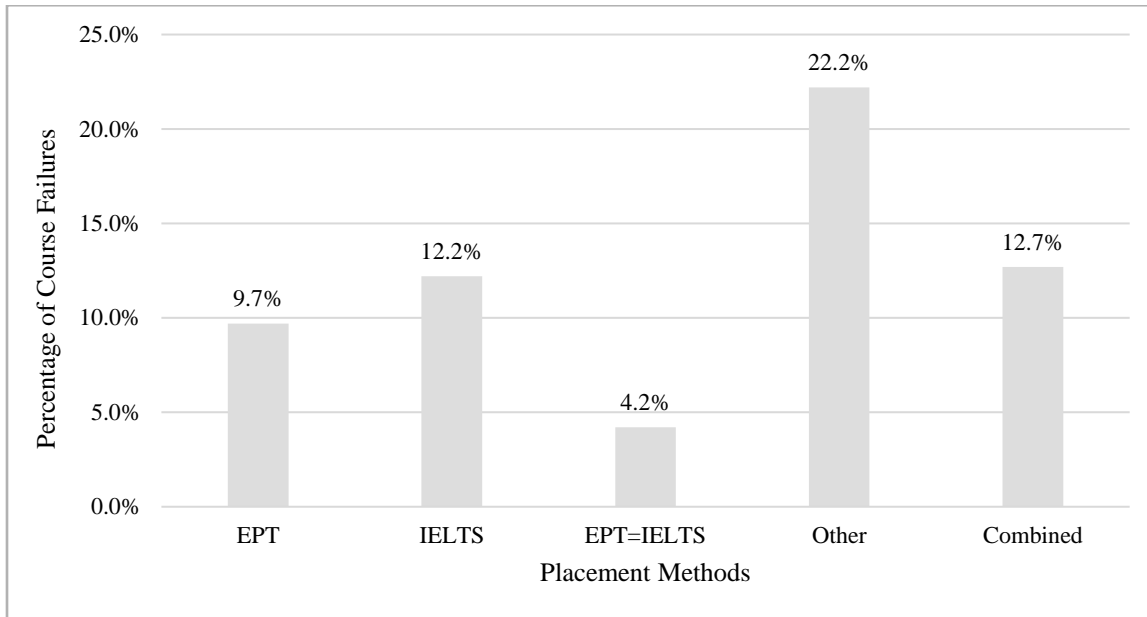
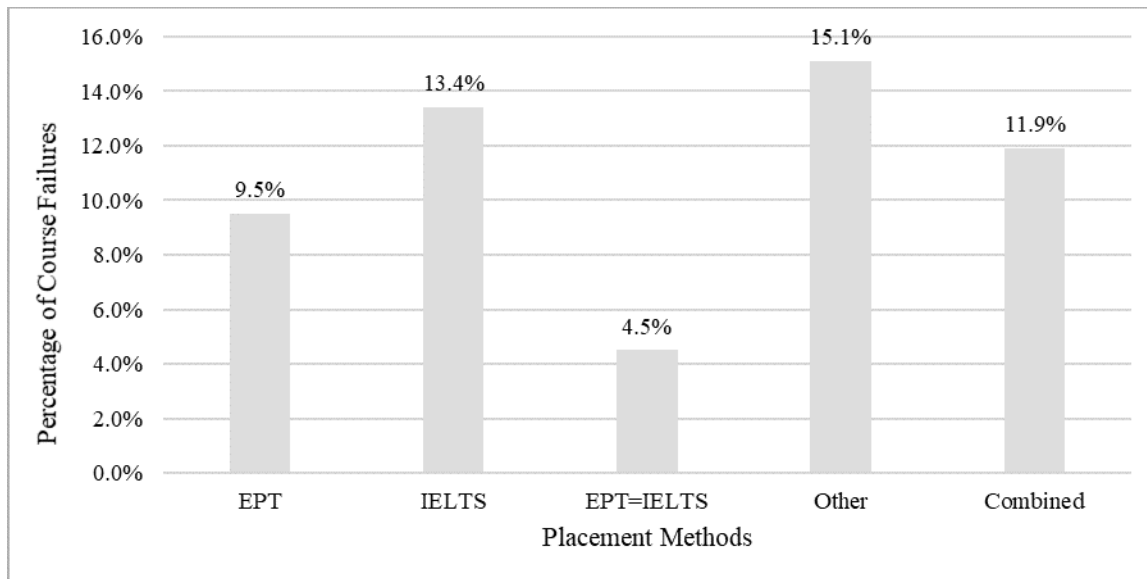


Figure 4

Total Percentage of EAP Courses New ELLs Failed by Placement Method for All Pre-COVID-19 Semesters



How many students who had taken the TRU EPT were placed into higher course levels as a result of their IELTS scores, and how did they perform in those courses?

To answer this question, I began by identifying which students had both TRU EPT and IELTS scores. The test group included the students whose IELTS scores resulted in higher EAP course placements than the EPT would have permitted. The total across the six semesters was 104 course enrollments within the test group (see Table 5) with a course failure rate of 13.5%.

Table 5

Course Placements Bumped Up via IELTS Scores (Test Group)

Semesters	Number of EAP Courses	Number of EAP Courses Passed	Number of EAP Courses Failed	Percentage of Courses Failed
All	104	90	14	13.5%
Pre-COVID-19	93	81	12	12.9%

I created two different control groups to determine how these students performed by comparison. Control group 1, which included the IELTS course placements that were not bumped up to a higher level, constituted 120 course enrollments with a 5.0% failure rate (see Table 6). Control group 2 was comprised of all EAP course placements made according to the EPT scores, totalling 118 enrollments and an overall failure rate of 6.8% (see Table 7, next page), combined with control group 1, the IELTS course placements that were not bumped up. Because only two students were placed via the TRU EPT in the 2020 fall semester and they did not have IELTS scores, this semester was excluded from the analyses. The descriptive statistics show that students had a higher failure rate in the courses in which they were bumped up one or more levels due to their IELTS scores; however, to ascertain whether this observation was significant, I employed inferential statistics.

Table 6

IELTS Course Placements NOT Bumped Up (Control Group 1)

Semesters	Number of EAP Courses	Number of EAP Courses Passed	Number of EAP Courses Failed	Percentage of Courses Failed
All	120	114	6	5.0%
Pre-COVID-19	91	85	6	6.6%

Note. This table includes placements in which the EPT matched the IELTS course assignment.

To examine the relationship between placement method and success in a course, I conducted chi-square tests of independence using control group 1. My hypothesis was that IELTS course placements that were higher than the respective EPT scores were more likely to result in failure than IELTS course placements that were not higher. The correlation between the variables was significant, $X^2(1, N = 224) = 4.91, p = .03$, meaning that ELLs were more likely to fail EAP courses in which they were bumped up. However, when the 2020 winter semester was removed, the results were no longer significant, $X^2(1, N = 184) = 2.07, p = .15$.

Table 7*EPT Course Placements*

Semesters	Number of EAP Courses	Number of EAP Courses Passed	Number of EAP Courses Failed	Percentage of Courses Failed
All	118	110	8	6.8%
Pre-COVID-19	109	101	8	7.3%

Note. This table excludes placements in which the EPT matched the IELTS course assignment to avoid counting these courses twice.

Further chi-square tests of independence were performed using control group 2, IELTS course placements that were not bumped up combined with EPT course placements. Again, my expectation was that course placements bumped up by IELTS scores stood a greater chance of failure. The first chi-square test showed that there was a significant association between placement method and the failure rate, thus confirming my hypothesis, $X^2(1, N = 342) = 5.53, p = .02$. Conversely, the second chi-square test, which included only pre-COVID-19 semesters, failed to reject the null hypotheses, $X^2(1, N = 293) = 2.74, p = .098$, with a .05 alpha.

Were the students placed according to their IELTS scores more likely to fail their EAP courses during their first semester than those placed according to the TRU EPT?

To determine if there was a relationship between placement method, semester, and course success I ran several logistic regression analyses. The independent variables were method of placement and first semester of study, and the dependent variable was success in a course. The results of these analyses are presented in Table 8 below:

Table 8*Course Failure Rate Analyses*

Analyzed methods and semesters	Results (Case = course)
All Semesters (EPT vs. IELTS)	Placement method: Beta value = .34, <i>SE</i> = .17, <i>p</i> = .044* Semester: Beta value = -.16, <i>SE</i> = .05, <i>p</i> = .002*
Pre-COVID-19 Semesters (EPT vs. IELTS)	Placement method: Beta value = .41, <i>SE</i> = .18, <i>p</i> = .02* Semester: Beta value = -.2, <i>SE</i> = .07, <i>p</i> = .004*
All Semesters (All Placement Methods)	Placement method: Beta value = .32, <i>SE</i> = .06, <i>p</i> < .001* Semester: Beta value = -.03, <i>SE</i> = .04, <i>p</i> = .51
Pre-COVID-19 Semesters (All Placement Methods)	Placement method: Beta value = .16, <i>SE</i> = .08, <i>p</i> = .046* Semester: Beta value = -.19, <i>SE</i> = .06, <i>p</i> = .003*

* Significant ($p < .05$)

As previously mentioned, the analyses done for the course cases were also done with student as the case but resulted in non-significance for placement method.

In the logistic regression analysis that compared the TRU EPT with IELTS, both the placement method ($p = .044$) and the semester ($p = .002$) significantly predicted success in an EAP course. The results remained significant for both independent variables with the removal of the 2020 winter and fall semesters. Similar chi-square analyses were run which did not control for semester variation. These analyses were not significant except for the Pre-COVID-19 Semesters (EPT vs. IELTS) analysis which was significant, $X^2(1, N = 1319) = 4.78, p = .03$.

In the logistic regression analysis that investigated the relationship between all placement methods and all semesters, the placement method had a significant effect on success in an EAP course ($p < .001$) while the semester did not ($p = .51$). When only pre-COVID-19 semesters were included in the analysis, both the placement method ($p = .046$) and the semester ($p = .003$) were predictive of course success.

Did the students who had higher IELTS overall band scores than required have a greater success rate than those whose overall band scores met the requirements for the EAP program level in which they were placed?

To determine program and course placements of NNES, TRU staff and faculty rely on both the IELTS overall band score and the lowest band score. This reliance on overall and lowest band scores means that some students may have an overall band score that would normally allow them to enroll in a higher EAP course level or an academic program but have one band score that is below the threshold for entry into that level or program.

I conducted two chi-square analyses to find out if the students who had an overall IELTS band score above the course level in which they were placed were more likely to succeed in their courses than students whose overall IELTS band score matched the level. The students whose IELTS band scores were not specified in the available documents were removed from the data set, leaving a sample size of 206 students representing 586 EAP course enrollments (see Table 9, next page). A total of 69 students for all six semesters combined and 40 students for pre-COVID-19 semesters (see Table 10, next page) had overall band scores above the required threshold.

According to Tables 9 and 10, the students who had higher overall IELTS band scores actually had higher failure rates (11.9% and 13.2%) than those who had lower overall band scores (7.2% and 7.7%). Nevertheless, the outcome of the chi-square that included data from all semesters failed to reject the null hypothesis ($X^2(1, N = 586) = 3.43, p = .06$) as did the chi-square that only included pre-COVID-19 semesters ($X^2(1, N = 402) = 2.58, p = .11$). A lack of significance suggests equivalency.

Table 11 (next page) shows the distribution of IELTS placements across the EAP program levels, which reveals a potential reason for the higher—though statistically insignificant—failure rate of students with overall IELTS band scores above the threshold. The percentage of level five course enrollments by students with high overall band scores (i.e., 64.3%) was much larger than for those with regular overall band scores (i.e., 33.0%). This is noteworthy because level five students can take three other academic courses alongside their EAP courses, so they may have placed more importance on passing those courses than the EAP courses. As well, level five courses are, inherently, more challenging than lower level courses.

Table 9*IELTS Placements: All Semesters*

Overall Band Score	Number of Students	Number of EAP Courses	Number of EAP Courses Failed	Percentage of Courses Failed
Above threshold	69	168	20	11.9%
Meets threshold	137	418	30	7.2%

Table 10*IELTS Placements: Pre-COVID-19 Semesters*

Overall Band Score	Number of Students	Number of EAP Courses	Number of EAP Courses Failed	Percentage of Courses Failed
Above threshold	40	91	12	13.2%
Meets threshold	102	311	24	7.7%

Table 11*IELTS Placements by EAP Level: All Semesters*

Overall Band Score	Number of Level 3 Course Enrollments	Level 3: Percentage of Overall	Number of Level 4 Course Enrollments	Level 4: Percentage of Overall	Number of Level 5 Course Enrollments	Level 5: Percentage of Overall
Above threshold	20	11.9%	40	23.8%	108	64.3%
Meets threshold	80	19.1%	200	47.8%	138	33%

Discussion

This study investigated EAP student success through the effectiveness of the IELTS test compared to the TRU EPT in placing students into appropriate EAP course levels by examining four questions.

The first question explored the EAP course failure rate for each of the following placement methods: TRU EPT, IELTS, and all other methods. The descriptive statistics revealed that students placed via IELTS scores were less likely to succeed in EAP courses than those placed via TRU EPT scores. The greatest course success rates were attributed to those cases in which the students' EPT scores and the IELTS scores led to the same placement. This result affirms the expectation that when course placements based on two different tests coincide, the chances of success would increase. Other placement methods, which include a wide range of pathway agreements and other tests, generally resulted in the highest course failure rates.

Research question number two attempted to answer an important ELLT faculty concern: Do students have adequate English language proficiency and preparation to succeed in the EAP course levels into which their IELTS scores place them? As mentioned in the introduction, this concern primarily arose from some students taking EAP courses that are one, two, or even three levels above where the TRU EPT would have placed them. The results of chi-square tests suggest that the concerns may be warranted. Students whose course level via IELTS placement was not higher than their course level would have been via EPT placement tended to be more successful.

Third, to determine whether or not students placed via IELTS were less likely to succeed in EAP courses than those placed via the TRU EPT, I used logistic regression analyses comparing these two placement methods, which confirmed that IELTS placements resulted in a greater likelihood of course failure. When I expanded the logistic regression analyses to include the “other” placement method category, the placement method remained statistically significant.

The comparison of course success of students who had overall IELTS band scores above the minimum requirement to those with overall IELTS band scores that met the EAP course level requirement did not yield a significant difference. In other words, students with higher overall IELTS band scores did not have higher success rates than those with regular overall IELTS band scores. This result supports the current TRU practice of giving consideration to both the overall band score and the lowest band score to place students into appropriate EAP course levels.

Pedagogical Implications

The results indicate that the on-campus EPT more effectively predicts student success and more closely aligns with the EAP program at TRU than the IELTS test does. This outcome could be attributed to the contribution of ELLT faculty expertise in the EAP placement process. A study by James and Templeman (2009) that confirmed the efficacy of the TRU EPT found that ELLT faculty involvement was integral:

The effectiveness of the comprehensive EAP placement process at TRU was determined to depend to a significant degree on extensive involvement by faculty. By facilitating the oral interview, assessing the writing sample, and interpreting the Accuplacer ESL results, faculty significantly improved the accuracy of student placement. (p. 94)

According to Murray (2015), having “a *sense* [sic] of what different test scores represent in real performance terms” is a key element for those making university admission and placement decisions based on test scores to possess (p. 111). This sense of what test scores represent makes ELLT faculty uniquely qualified to accurately place students; from years of teaching, they not only have an experiential awareness of ELLs’ capabilities but also a thorough understanding of the EAP program.

Limitations and Future Research

The logistic regression analyses showed semester-to-semester variations in terms of EAP course enrollments and student success which may have influenced the results of this study. With

programs typically beginning in September, fall semesters have the highest number of new student course enrollments while summer semesters have the lowest. Furthermore, although this study did not track student demographics, including nationality, I have observed in practice patterns, such as groups of Japanese university exchange students typically enrolling in EAP courses in the fall semesters. Semester-to-semester variations, a pandemic, and emergent placement methods, such as Duolingo and IELTS Indicator, necessitate further years of data comparison to allow for controlling for the effects of semester and deeper exploration of methods.

Furthermore, counting course DNCs as failures may have affected the results. According to the TRU grading systems policy (n.d.a), failing to complete at least 50% of course work or mandatory course components without officially withdrawing from the course results in a DNC. However, there are reasons unrelated to academic readiness and English proficiency which may lead to a DNC, such as a personal crisis, a health issue, or time mismanagement. To mitigate this effect, future research could include a qualitative student survey with subsequent focus groups that examine students' experiences in the courses, as well as their perceptions of the accuracy of the test.

Since students who were placed into EAP courses via their IELTS scores had a higher failure rate, it is worth exploring ways to further support these students. There are already two academic student services available to EAP students: the ELLT Department's Language Learning Centre and the TRU Writing Centre. Although these services are already recommended to EAP students at TRU, the number of students placed via IELTS versus EPT who access these services is unknown. There may be a link between the placement method and the probability of seeking services yet to be demonstrated by research.

The findings of this study raise an important question, especially in light of uncertain global circumstances. While one advantage of the IELTS test is its worldwide availability allowing NNES to take the test in their home countries, the recent global pandemic has exposed the need for more flexible testing options to address mobility restrictions and allow students to continue to access post-secondary education. This need for flexibility has led to the emergence of remote testing options, such as Duolingo, which enable students to take English proficiency tests from the presumed safety of their homes. The IELTS academic test and in-house EPTs were not originally designed to be administered remotely. This lack of remote options has posed a challenge for many post-secondary institutions, including TRU, and has partly been responsible for a decline in international enrollments since the pandemic began, leading to an important question: Is there a way to remotely administer the in-house EPT without jeopardizing prospective students' privacy, compromising the test's security, or removing a crucial component of the EPT process, the involvement of ELLT faculty? During the pandemic, IELTS (n.d.a) temporarily offered a remote test in several countries, but not mainland China, and the remote option was accepted by some but not all institutions.

Conclusion

This study explored the relationship between the placement method and student success in EAP courses. The results of logistic regression analyses revealed that the in-house EPT performed

significantly better in placing students into level-appropriate courses than IELTS. These findings support the continued and perhaps increased reliance on the EPT process as it yields more accurate EAP course placements and thus greater student success compared to the IELTS test. It is not time to abandon in-house English placement tests at post-secondary institutions.

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