Tracking English Language Proficiency and IELTS Test Scores in an International Undergraduate Conditional Admission Program in the United States

REESE M. HEITNER, BARBARA J. HOEKJE, AND PATRICK L. BRACISZEWSKI
Drexel University

THE DREXEL UNIVERSITY INTERNATIONAL Gateway Program is a year-long conditional admission program designed to prepare international students with low English proficiency for successful matriculation into Drexel University. Administered by the Drexel University English Language Center, the program consists of a foundational sequence of study including intensive English classes and standardized test preparation as well as selected credit-bearing university courses. In addition to progressing through this coursework, participants are required to achieve a standardized testing score mandated by the university for matriculation. In the first year of the program, which ran during the academic year from 2010 to 2011, thirty-two of forty-four total participants enrolled in the program progressed satisfactorily, achieved the required IELTS exit score of 6.0, and entered the university—a fall 2011 matriculation rate of 73 percent. On average, participants achieved IELTS score gains on a term-by-term basis toward the required program exit score of 6.0—data useful for measuring score gains across several intervals. Statistical correlations among term-by-term IEP level progression and term-by-term IELTS scores were consistent, strong, and significant, suggesting that intensive English program coursework supported IELTS score gains. Correlations between post-program university matriculated GPAs and pre-program entry scores, however, were slight and not statistically significant, suggesting that matriculated participants had achieved a sufficient level of English language proficiency so that pre-program language abilities did not impact their post-program collegiate performance. Fall 2011 first-year, first-term university GPAs for post-Gateway matriculated students averaged 3.10—higher, but not statistically different than either directly admitted first-term international or first-term domestic students. These initial first-year program results are part of a more comprehensive process of program validation and can provide university administrators with more information by which to plan, execute, and evaluate international conditional admission programs.
International Gateway Program

The Drexel University International Gateway Program (Gateway) is administered by the English Language Center (ELC), a CEA-accredited intensive English language program located in Philadelphia, Pennsylvania. The Gateway program consists of three to four eleven-week terms of intensive English program (IEP) courses, standardized test preparation, periodic IELTS (International English Language Testing System) testing, and credit bearing courses within the Drexel University College of Arts and Sciences (CoAS).\textsuperscript{1} Participants are admitted into the program on the basis of an online application, high school transcripts, and standardized English language assessment scores. Whereas direct undergraduate admission to Drexel University requires minimal scores of TOEFL 550, TOEFL iBT 79, and IELTS 6.0 to 6.5, otherwise academically admissible applicants were admitted to the Gateway program in AY 2010–2011 with scores no lower than TOEFL iBT 47 and IELTS 4.5. To graduate from the Gateway program and successfully matriculate as Drexel University students in fall 2011, participants were required to maintain satisfactory performance in their IEP and CoAS courses, achieve minimum standardized exit test scores, and earn a letter of recommendation from their academic advisor.

Research Questions

The current research study was designed to examine the performance of Gateway participants across three measures: IEP coursework, IELTS scores, and university GPAs.\textsuperscript{2} These data were collected to track participants’ ability to progress through the Gateway program, meet matriculation requirements, and achieve academic standing during their first term of fully matriculated university coursework equivalent or superior to their directly admitted peers. The current research study addressed three questions:

1. What is the relationship between English language proficiency as measured by successive IELTS scores and IEP course level progression?
2. What is the relationship among initial program entry scores and university GPAs?
3. How do first-year post-Gateway matriculated students compare against directly admitted students in terms of matriculated GPAs?

In short, does the Gateway program prepare international students with low English proficiency to meet matriculation requirements and then succeed in their university academic coursework?

Though the focus of the current study was principally internal program evaluation, the data collected also speak to the more general issue of standardized English language proficiency scores, and, in particular, the measurement of IELTS score gains. Given that Gateway participants were required to sit for the IELTS exam each term, the data collected also provide a picture of the magnitude and rate of score gains across several months of intensive English language coursework at a US university. Indeed, it seems this paper is the first published account of IELTS score gains in the United States. For recent IELTS research conducted in the United Kingdom,
see, for example, Archibald (2002) and Lloyd-Jones and Binch (2012); in Australia and New Zealand, see Craven (2012), Elder and O’Loughlin (2003), Ingram and Bayliss (2007), O’Loughlin and Arkoudis (2009), and Read and Hayes (2003); and in Canada, see Golder, Reeder, and Fleming (2011). Davies (2008) provides a broad historical overview of the IELTS exam, while Green (2004, 2005, 2007) shares IELTS data across several studies.3

Context of Research

**AY 2010–2011 Program Design**

The year-long Gateway program consists of a sequence of three or four eleven-week terms, with the fall and winter terms emphasizing English language skills and IELTS test preparation, and the spring and summer terms emphasizing content from university credit-bearing courses. Gateway participants were required to take at least ten credit hours—and were eligible to take a total of seventeen credit hours—of first-year level mathematics, chemistry, and humanities CoAS courses while still within the Gateway program. Table 13.1 depicts this Gateway course of study.

**AY 2010–2011 Program Participants**

Similar to the student population served by Drexel University’s English Language Center, AY 2010–2011 Gateway participants were predominantly Middle Eastern or Asian, speaking either Arabic or Chinese as native languages. Figure 13.1 displays native language and gender demographic data of the Gateway participants.

Simple means t-tests—comparing average incoming IELTS scores grouped by native language and gender—were conducted. No statistically significant effects for native language or gender were found vis-à-vis entry test scores or subsequent IELTS scores, IELTS sub-skills, IEP course progression, matriculation rates, or university GPAs.

**AY 2010–2011 Program Outcomes**

Of the forty-four enrollees in the program during AY 2010–2011, thirty-two completed the program and were admitted as first-year students to Drexel University in fall 2011, a matriculation rate of 73 percent for the program’s first year. Seven Gateway students were dismissed from the program for low performance or other issues, and five voluntarily transferred out of the program to begin university study in other programs.

**Method**

**AY 2010–2011 English Language Proficiency**

IEP level placement and progression. Participants in the Gateway program were placed and evaluated for promotion within a sequence of listening/speaking and reading/writing IEP classes at Drexel University’s ELC. Gateway participants generally advanced through their IEP courses at a rate of one level per term, the expected progression at ELC. Overall, thirty-six of thirty-eight participants taking listening/speaking classes and thirty-six of thirty-eight participants taking reading/writing
Table 13.1
AY 2010-2011 Gateway Curriculum

<table>
<thead>
<tr>
<th>Program Features</th>
<th>Term 1 Fall 2010</th>
<th>Term 2 Winter 2011</th>
<th>Term 3 Spring 2011</th>
<th>Term 4 Summer 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Language/Communication Skills</td>
<td>15 hours ELC</td>
<td>15 hours ELC</td>
<td>7.5 hours ELC</td>
<td>10.5 hours ELC</td>
</tr>
<tr>
<td>(per week)</td>
<td>Oral Communication</td>
<td>Oral Communication</td>
<td>Foundations of Academic Writing (CHEM support)</td>
<td>Skills for College Success</td>
</tr>
<tr>
<td></td>
<td>Written Communication</td>
<td>Written Communication</td>
<td></td>
<td>Oral Communication</td>
</tr>
<tr>
<td>Test Preparation (per week)</td>
<td>6 hours IELTS preparation</td>
<td>6 hours IELTS preparation</td>
<td>3 hours IELTS preparation</td>
<td>or Skill for College Success</td>
</tr>
<tr>
<td>CoAS Credit Courses (per term)</td>
<td>Math placement test</td>
<td>MATH (3-4 credits)</td>
<td>MATH (3-4 credits)</td>
<td>MATH (3-4 credits)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CHEM (3 credits)</td>
<td></td>
<td>PHIL (3 credits)</td>
</tr>
<tr>
<td>End of Term Testing</td>
<td>IELTS December 2010</td>
<td>IELTS March 2011</td>
<td>IELTS June 2011</td>
<td>IELTS August 2011</td>
</tr>
<tr>
<td>ELC Support</td>
<td>Advising</td>
<td>Advising</td>
<td>Advising</td>
<td>Advising</td>
</tr>
<tr>
<td>University Support</td>
<td></td>
<td>Math Resource Center</td>
<td>Math Resource Center</td>
<td>Math Resource Center</td>
</tr>
</tbody>
</table>

classes in fall 2010 were promoted to the next level in winter 2011, the expected result for the IEP curriculum.

IELTS examination. The standardized IELTS exams were integral to the Gateway program; these exams were administered at the end of each term (approximately every eleven weeks) by the Drexel University IELTS Test Center (#US112). IELTS is the International English Language Testing System, a standardized English language proficiency exam jointly administered by the British Council, IDP Australia, and University of Cambridge (ESOL Examinations). Currently, IELTS scores are accepted by over seven thousand receiving institutions, including an increasing number of institutions in the United States, now numbering some 2,500 (IELTS 2012).

The IELTS exam is a “four skills” exam that independently tests listening, reading, writing, and speaking. Candidates sit for a collectively proctored paper-and-pencil exam consisting of a listening module (thirty minutes), a reading module (one hour), a writing module (one hour), and a live, one-on-one speaking interview (eleven to fourteen minutes). The IELTS exam is offered in two formats: a general training format intended for professional certification and general immigration to English-speaking countries, and an academic format intended specifically for admission to
Institutions of higher education in English-speaking countries. All candidates sit for the same listening and speaking modules, while the reading and writing modules differ between general training and academic formats. Gateway participants sat for the academic IELTS exam. IELTS candidates are awarded a total of five scores, each ranging from one (lowest) to nine (highest) in half-band (0.5) increments (e.g., 4.5, 5.0, 5.5) for each of four skills—as well as an overall IELTS score representing a rounded average of all four subskills. There are no restrictions on the frequency of repeated test taking and scores are valid for two years.

IELTS score progression. Participants entered the Gateway program with IELTS entry scores (or TOEFL scores) generally ranging between 4.5 and 6.0, though two participants entered the program at 6.5. The average entry score for both the full cohort of forty-four participants and for the thirty-two successfully matriculating participants was 5.4. The average entry score of participants eventually dismissed from the program (n = 7) was slightly lower at 5.2, and that of participants voluntarily transferring out of the program (n = 5) somewhat higher at 5.7.

In addition to supplying pre-program test scores, program participants were required to sit for the IELTS exam each term until cleared for matriculation. As shown in Figure 13.2, average IELTS scores for program participants increased each term.

In addition to tracking overall test scores, scores for each of four subskills were also collected and analyzed, save for sub-skill scores from pre-program entry tests, which were not available. Figure 13.3 provides average IELTS scores across all test dates for each of the four subskills of listening, reading, writing, and speaking among the thirty-two matriculated students.

Figure 13.1: Demographic Data of Gateway Participants

<table>
<thead>
<tr>
<th>Native Language (n = 44)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2% 9 Arabic</td>
</tr>
<tr>
<td>21% 34 Chinese</td>
</tr>
<tr>
<td>77% 1 Spanish</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender (n = 44)</th>
</tr>
</thead>
<tbody>
<tr>
<td>41% 26 Female</td>
</tr>
<tr>
<td>59% 18 Male</td>
</tr>
</tbody>
</table>
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Figure 13.3 reveals that participants consistently achieved higher scores on the productive writing and speaking tasks and lower scores on the receptive listening and reading tasks. Indeed, the relative contributions to increases in overall scores were not equal across the four subskills. Increases in overall scores were primarily the result of increases in writing and speaking scores, with listening and reading scores contributing less to improvement in overall test scores.

Relationship between IEP level and IELTS score progression. Since participants sat for the IELTS exam at regular intervals throughout the year-long Gateway program, a total of ninety-two IELTS scores were recorded along with participants’ IEP levels at the time of the tests. The average IELTS score rose from a low of 4.5 in level 2 reading and writing to a high of 6.1 in level 6 reading and writing. Figure 13.4 depicts a strong, positive, and significant correlation between IEP course progression and IELTS scores. At a minimum, this correlation indicates that increasing IELTS scores are consistent with ELC course level progression, suggesting the IELTS exam is assessing language skills similar to those measured by ELC placement tests and promotion guidelines.

**AY 2010–2011 University Courses**

Gateway CoAS performance. In addition to progressing through a sequence of IEP courses, Gateway participants were required to take credit-bearing university CoAS courses. While Gateway participants chose either a calculus-based or non–calculus-based sequence of math courses, all participants were required to take CHEM 201 in the spring 2011 term. Moreover, it is important to note that all winter 2011 and spring 2011 courses were offered in sheltered formats. These math and chemistry courses, though taught by Drexel University CoAS faculty, enrolled only Gateway participants and included additional pedagogical support in the form of content and language assistance. Only summer 2011 courses, the fourth and final term in the Gateway program, were regularly scheduled Drexel University courses.

Figure 13.5 presents the average and range of Gateway student performance in CoAS courses within the Gateway curriculum, as measured by GPA. The eight
KEYS TO COLLEGE

Gateway CoAS courses were MATH 100 or MATH 110 (scheduled in winter 2011), CHEM 201 and MATH 101 or MATH 121 (scheduled in spring 2011) and PHIL 105 and MATH 102 or MATH 122 (scheduled in summer 2011). Course GPAs indicate that, as a group, participants performed successfully in their Gateway CoAS courses.

The overall cumulative average Gateway CoAS GPA across all courses and participants was 3.25.

Given that participants were also sitting for the IELTS exam on a term-by-term basis, term-by-term GPAs were related to these IELTS scores. However, term-by-term GPAs were largely uncorrelated with (generally increasing) term-by-term IELTS scores. The fact that IELTS scores did not correlate with CoAS course GPAs suggests that participants were achieving at least a threshold level of academic
language proficiency to manage their CoAS courses in the sheltered formats of the winter 2011 and spring 2011. In fact, the lowest GPAs were earned in spring 2011, indicative of the specific demands of the math courses offered at that time. By the same token, no significant correlation was obtained between cumulative Gateway CoAS GPAs across terms and entry scores on pre-program tests, suggesting that lower language proficiency upon entry into the program did not adversely affect CoAS course performance.

Matriculated university performance. In addition to tracking the GPAs of participants while still within the Gateway program, the first-year, first-term GPAs of Gateway participants who subsequently matriculated were also collected. The average fall 2011 GPA among the thirty-two post-Gateway matriculated participants was 3.10. Of these thirty-two students, twenty-nine were in good standing at the end of the fall 2011 term, two were placed on the Dean’s list, and one was on probation. This fall 2011 post-Gateway GPA of 3.10 is lower than the 3.25 cumulative average GPA for CoAS courses taken during the Gateway program, but like Gateway CoAS GPAs, matriculated fall 2011 GPAs were not significantly correlated with initial entry scores. This average GPA of 3.10 indicates that the Gateway curriculum, including credit-bearing courses, was successful in addressing the needs of lower English proficiency participants.

Moreover, individual student GPAs appear stable over time: pre-matriculation Gateway CoAS GPAs are strongly correlated with post-matriculation fall 2011 GPAs ($r = 0.425, p < 0.05$); this further confirms the fact that university performance was largely independent of initial entry scores. Once a threshold level of language proficiency was reached, GPAs appear to be independent of the initial scores with which participants entered the program.

Comparison among Gateway matriculated GPAs and direct admission GPAs. If nine to twelve months of intensive English study and supported university coursework was sufficient

![Figure 13.5 Average and Range of Gateway CoAS GPAs for Matriculated Students](image-url)
to raise English proficiency to a collegiate level, then Gateway alumni students should have performed comparably to their direct admission peers. Comparability is a critical test for any preparatory conditional admission program. Table 13.2 shows that the Gateway alumni were indeed competitive with their direct admission peers during their first three terms of matriculated college study; t-tests confirm that Gateway alumni GPAs and direct admission GPAs were statistically equivalent.

Discussion

Program Validation

Drexel University’s International Gateway program was designed to prepare low English proficiency international students for college success. From this perspective, the first year of the AY 2010–2011 Gateway program succeeded, having provided thirty-two out of forty-four participants with the proverbial keys to college. Unlike some college preparatory, foundational, or university-sponsored bridge programs in the United States, the Gateway program required participants to achieve a target exit score on a standardized English language test, in addition to satisfying other program requirements, in order to matriculate. Course progression alone was not sufficient. Approximately 75 percent of the participants achieved the required IELTS exit score of 6.0 within this three- to four-term program, as well as satisfying all other prerequisites for matriculation. This success rate is no doubt attributable to a variety of factors—some related to the Gateway program and its features, and others related to the participants themselves.

One factor that appears to have supported participant success was the intensive English language coursework. IEP course progression was strongly correlated with IELTS scores throughout the program ($r = 0.482$ to $0.486$, $p < 0.01$), suggesting coursework was a factor sustaining score gains. The credit-bearing CoAS courses could have also played an important role in supporting language proficiency during the Gateway program. Though offered in sheltered formats in winter 2011 and spring 2011, these university courses demand levels of academic language expected of university students. The sheltered format and additional assistance provided a support structure by which to meet these demands and practice the academic discourse necessary for collegiate studies.

While IELTS score gains advanced alongside IEP coursework, credit-bearing university course GPAs were not correlated with IELTS score gains. Correlations among term-by-term IELTS scores and term-by-term Gateway program CoAS GPAs

Table 13.2

<table>
<thead>
<tr>
<th>Term</th>
<th>Fall 2011</th>
<th>Winter 2012</th>
<th>Spring 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gateway</td>
<td>3.10</td>
<td>3.04</td>
<td>3.18</td>
</tr>
<tr>
<td></td>
<td>($n = 32$)</td>
<td>($n = 31$)</td>
<td>($n = 30$)</td>
</tr>
<tr>
<td>Direct international</td>
<td>2.96</td>
<td>3.05</td>
<td>3.18</td>
</tr>
<tr>
<td></td>
<td>($n = 376$)</td>
<td>($n = 368$)</td>
<td>($n = 361$)</td>
</tr>
<tr>
<td>Direct domestic</td>
<td>3.03</td>
<td>2.95</td>
<td>3.07</td>
</tr>
<tr>
<td></td>
<td>($n = 2,730$)</td>
<td>($n = 2,593$)</td>
<td>($n = 2,523$)</td>
</tr>
</tbody>
</table>
were inconsistent and often not statistically significant, suggesting that performance in these chemistry, math, and philosophy courses was not directly related to increasing English-language proficiency. Indeed, by the second term of the Gateway program, it was not uncommon for participants to earn significantly different Gateway CoAS course grades within the same term, intuitive confirmation that nonlinguistic factors such as course-specific content, background knowledge, study habits, and other individual factors play an important role in determining course GPA.

The fact that there was no significant correlation between cumulative Gateway CoAS grades and standardized test scores at entry is perhaps another source of program validation; after reaching a basic threshold of English proficiency, cumulative GPAs reflect not only a sufficient level of English language, but content-relevant performance. In this way, the CoAS grades earned during the Gateway program (before matriculation) indicate that with sufficient support in the form of sheltered instruction, tutorial assistance, and reduced academic load (maximum two university courses per term), Gateway participants were generally able to manage their university coursework prior to full matriculation.

Post-Gateway matriculated first-term GPAs did not correlate with entry scores either, but did correlate with Gateway GPAs from courses taken during the Gateway program. The absence of a correlation between test scores at entry and matriculated university GPAs again suggests the matriculated Gateway students had achieved at least a minimum threshold level of English language proficiency so that their initial pre-Gateway language abilities did not appear to have a lasting impact on their collegiate performance. In this way, the Gateway program, having addressed the needs of lower English proficiency participants, mainstreamed a cohort for matriculation.

Several previous studies have investigated the predictive validity of IELTS scores—the relationship between IELTS scores and subsequent academic performance and GPAs—with mixed results. Some studies have reported some significant correlations (Bellingham 1993; Cotton and Conrow 1998; Feast 2002; and Kerstjens and Nery 2000), but, while positive, these correlations between IELTS scores and academic achievement were variable and small. Given that the relationship between English language proficiency and academic performance is mediated by a diversity of factors (motivation, intellect, acculturation, content knowledge, background experience, etc.), these results are not surprising.

Finally, if the Gateway participants were indeed ready for college, then they should have performed comparably to their direct admission peers. The average post-program, first-year matriculated GPAs among Gateway alumni were statistically equivalent to those earned by direct admission international and direct admission domestic students. More information—including longitudinal data tracking this first cohort of Gateway participants throughout their collegiate years as well as successive cohorts of future Gateway participants—is needed, however, to better answer Green (2007, 314), who asks, “Are learners who pursue pre-sessional programs in EAP better able to cope with [the demands of university study] than those accepted on the basis of proficiency scores alone?” Nevertheless, the program overview and data presented here are an indication that pre-university course experience and academic support, especially in sheltered formats, can play a role in supporting college success.
Quantifying IELTS Score Gains

The Gateway data collected here, in addition to providing a basis for evaluating Drexel University’s conditional admission program, also speak to the more general issue of standardized test score gains. Since program participants sat for the IELTS at regular intervals, average score gains across multiple sittings were calculated. Four testing intervals were created, corresponding to the periodic IELTS testing which occurred toward the end of each eleven-week term. The average IELTS score gain per eleven-week term—regardless of score and independent of test date—was 0.35 points. Average score gains for longer intervals are predictably greater: 0.58 points across any two terms and 0.83 across any three terms. Table 13.3 presents these score gains as well as more detailed score gain data.

This average score gain of 0.35 per eleven-week term obscures the fact that lower scoring test takers tended to achieve greater score gains than higher scoring test takers. For example, the five participants with a 4.5 score (at any time during the program) experienced an average score gain of 1.30 points over an eleven-week interval. Reading further down the column, the fourteen participants who sat for the exam with a score of 5.0 increased their scores by an average of 0.61 points; those with 5.5 only by 0.26, and those with 6.0 by a mere 0.15 points over eleven weeks. Higher scores resulted in smaller score gains on the subsequent exam. This decreasing score gain dynamic appears to hold for the columns detailing two- and three-term intervals as well. Interval score gains generally decreased as scores increased, consistent with a score gain plateauing dynamic observed by Green (2004, 2005, 2007), which disproportionately advantages lower scoring test takers in comparison to higher scoring test takers.

This average IELTS score gain increase of 0.35 points per eleven-week interval is comparable to score gain data from two previous studies referenced by Green (2004). Though drawing upon much larger pools of IELTS score gain data from among thousands of repeat test takers (with scores ranging from band three to band 8), this average score gain of 0.35 per eleven-week term obscures the fact that lower scoring test takers tended to achieve greater score gains than higher scoring test takers.

Table 13.3
Average 1-term, 2-term, 3-term, and 4-term interval IELTS score gains of matriculated students (one term = 11 weeks)

<table>
<thead>
<tr>
<th></th>
<th>1-term interval</th>
<th>2-term interval</th>
<th>3-term interval</th>
<th>4-term interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n = 68)</td>
<td>(n = 38)</td>
<td>(n = 12)</td>
<td>(n = 1)</td>
</tr>
<tr>
<td>Average score</td>
<td>5.40→5.75</td>
<td>5.28→5.86</td>
<td>5.13→5.96</td>
<td>4.5→6.0</td>
</tr>
<tr>
<td>Average score gain</td>
<td>0.35</td>
<td>0.58</td>
<td>0.83</td>
<td>1.50</td>
</tr>
<tr>
<td>4.5</td>
<td>1.30 (n = 5)</td>
<td>1.00 (n = 4)</td>
<td>0.33 (n = 3)</td>
<td>1.5 (n = 5)</td>
</tr>
<tr>
<td>5.0</td>
<td>0.61 (n = 14)</td>
<td>0.75 (n = 10)</td>
<td>1.00 (n = 4)</td>
<td></td>
</tr>
<tr>
<td>5.5</td>
<td>0.26 (n = 39)</td>
<td>0.48 (n = 23)</td>
<td>0.50 (n = 4)</td>
<td></td>
</tr>
<tr>
<td>6.0</td>
<td>0.15 (n = 10)</td>
<td>−0.50 (n = 1)</td>
<td>0.00 (n = 1)</td>
<td></td>
</tr>
</tbody>
</table>
seven) over intervals of at least three months, the data were analyzed only for writing score gains. Green (2004) reported average writing score gains from 5.12 to 5.42 (an increase of 0.29) in a sample of 3,052 candidates and from 5.26 to 5.63 (an increase of 0.37) in a sample of 15,380 candidates.

Of course, the Gateway program is not the only IEP to analyze IELTS test scores with an eye toward IELTS score gains, though it seems to be the first in the United States. Comparisons across studies must be approached carefully, as complicating and confounding variables abound: the amount of time between test dates, the nature and amount of instructional contact hours, and the range of initial entry test scores (see, e.g., Ross 1998).

Figures for contact-hours-to-one-band-increase range from a low of ten hours per band to a high of five hundred hours per band (Green 2007, 88). Given these disparities, a once-published IELTS rule of thumb suggesting a timeline of two hundred contact hours per band was removed from the IELTS Handbook in 2002. According to the present analysis, an average IELTS score gain increase of 0.35 points per term represents an average score gain increase of slightly more than one full band over the course of three terms, translating to approximately six hundred contact hours per band (given the course structure of the Gateway program). Of course, this score gain figure must be interpreted in light of the specific features of the Gateway program—including the 4.5 to 6.5 IELTS entry score range of the Gateway participants themselves. Test takers drawn from a weaker or stronger pool are likely to present a different score gain profile.

For instance, Read and Hayes (2003) reported that improvement among seventeen participants in a one-month program in New Zealand averaged an increase of 0.36 points on listening, reading, and writing (speaking was not included), advancing from an average of 5.35 to 5.71. Though comparable in terms of average IELTS band range, 0.36 points in one month represents an accelerated learning curve relative to the Gateway participants. In a larger study (n = 112), Elder and O’Loughlin (2003) report an average band score increase of 0.59 (from 5.0 to 5.59) during a ten- to twelve-week program consisting of two hundred to two hundred and forty hours of instruction.

Conclusion
As the number of international students seeking undergraduate admission to colleges and universities in the United States continues to increase (now numbering over seven hundred thousand annually9), placing these students into appropriate programs becomes more critical for advisors, IEP directors, and university admission officers. The data presented here contribute to this effort by sharing new program data among stakeholders to make better informed academic and policy decisions.

By the same token, as the global reach of IELTS increases and the number of IELTS test centers in the United States multiplies, the research footprint of IELTS testing in the United States correspondingly requires further definition and depth. In contrast to the well-developed research industry surrounding and informing English proficiency testing in the United States generally (see, e.g., Spolsky 1995), and TOEFL testing in particular (see Chapelle, Enright, and Jamieson 2008 for a recent
IELTS research specifically conducted in the United States is, to date, much more limited. The United States is mentioned only a handful of times in the 2008 volume *Assessing Academic English: Testing English Proficiency 1950–1989: The IELTS Solution* (Davies 2008) and US-based IELTS funded research is only just beginning to appear in *IELTS Research Reports*. Given the history of the IELTS exam, this focus is predictable, but not sustainable.

The present study, then, is a preliminary step toward redressing this IELTS research imbalance. Though an average score gain increase of 0.35 points per eleven-week term is reported here, we agree with Green’s (2004, 2005) conclusions that caution should be exercised when relating time of study to increase in scores. Given the interest in and potential utility of such score gain guidelines among test takers, receiving institutions, and IELTS partners, further research among universities and colleges, especially in the United States, is warranted.

**Acknowledgments**

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**NOTES**

1. Gateway participants meeting all matriculation requirements by the end of the spring 2011 term were not required to stay for the summer 2011 term. (They could, however, optionally take summer 2011 courses.) In AY 2010–2011, twenty-six participants were cleared for early matriculation by the end of the spring 2011 term. Six participants remained for the summer 2011 term.

2. Since the Gateway program itself consists of a sequence of credit-bearing university courses, there are two sets of university courses and resulting GPAs: university courses and GPAs from CoAS courses taken while still within the Gateway program, and university courses and GPAs from courses taken as first-year fully matriculated students (which include the College of Business and the College of Engineering as well as CoAS courses). All GPA data were provided by the Office of the Provost, Academic Information and Systems, Drexel University.

3. IELTS and its partners sponsor a series of three publications: *Studies in English Language Testing*, *Research Notes*, and *IELTS Research Reports* (where many of these articles can be found; see www.ielts.org/researchers/research.aspx).

4. Sixteen of the original forty-four participants entered the program with TOEFL iBT scores. These TOEFL scores were converted to IELTS scores for the uniform tracking of score gains according to a congruence table provided by Educational Testing Services. See www.ets.org/toefl/institutions/scores/compare. While conversions like this introduce many factors, score conversions from TOEFL iBT (scaled from zero to one hundred and twenty) to IELTS (scaled from zero to nine) are not subject to the same loss of information as are conversions from IELTS to TOEFL given the substantial difference in scale granularity. All subsequent standardized test scores were the result of IELTS examinations conducted at the Drexel University IELTS Test Center (#US112) through regularly scheduled IELTS examinations.

5. These two participants applied for direct university admission too late to be accepted as first-year students and were accepted into the Gateway program as an alternative. These two entry scores were included in the analysis of pre-program entry scores, but given their high entry scores, these two participants were not required to sit for the IELTS exam again (and their scores were not used in analyses related to score gains). Nevertheless, like other participants, both participants were...
required to satisfy all other program requirements. While the addition of these two participants raises potential problems related to program evaluation and data analysis, their inclusion reflects some of the realities facing conditional admission programs like Gateway. Of these two participants, one transferred out of the program while the other successfully matriculated.

6. These results contrast with the score gains reported by Craven (2012) where greatest score gains were achieved on the reading and listening modules.

7. The correlation between term-by-term ELC listening/speaking levels and term-by-term IELTS scores is significant, positive, and strong ($r = 0.486, p < 0.01$). Similarly, the correlation between term-by-term ELC reading/writing levels and term-by-term IELTS scores is also significant, positive, and strong ($r = 0.482, p < 0.01$).

8. The correlation between winter 2011 CoAS grades and December 2011 IELTS scores is just moderately positive and significant ($r = 0.308, p < .05$). However, the correlation between spring 2011 CoAS grades and March 2011 IELTS scores is not statistically significant ($p > 0.05$). When each term-by-term IELTS score is correlated with each term-by-term CoAS grade, the correlation between IELTS scores and corresponding CoAS grades is not statistically significant ($p > 0.05$).

9. According to the annually published Open Doors report (IIE 2011), the number of international students at colleges and universities in the United States was 723,277 during the 2010–2011 academic year—a five percent increase from the previous year—and a record high. Open Doors is published by the Institute of International Education (IIE 2011) in partnership with the US Department of State’s Bureau of Educational and Cultural Affairs.

REFERENCES


