

## **Determination of Appropriate IELTS Writing and Speaking Band Scores for Admission into Two Programs at a Canadian Post-Secondary Polytechnic Institution**

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### **Abstract**

This study aimed to determine the appropriate IELTS band scores in Writing and Speaking for admission to and success in Computer Systems Technology (CST) and Computer Information Technology (CIT) programs at a large Canadian polytechnic post-secondary institute. A second aim was to explore whether the quality of admissions decisions could be enhanced by aligning their processes more closely with the English language demands of actual tasks required within their target programs. This was done by examining course materials, activities, and assignments in which students are required to read, write, speak, and listen in English and then comparing the required proficiency in English for those tasks to band score descriptors provided by the IELTS measure. Data consisted of student interviews, faculty interviews, observations of lectures and labs, and course documents. Because of the small number of interviewees and the limited depth and scope of content analysis, results should be viewed as indicative rather than conclusive.

### **Résumé**

Cette étude a pour premier objectif d'identifier les tranches de résultats IELTS en production écrite et orale requises à l'admission et sanctionnant la réussite au Programme de Technologies des systèmes informatiques (TSI) et de Technologies d'informations dans l'informatique (TII) d'un institut polytechnique canadien de grande taille. Un second objectif est de déterminer si les décisions concernant l'admission peuvent être qualitativement améliorées en alignant plus étroitement le processus sur les exigences linguistiques en anglais requises pour l'accomplissement des tâches dans ces programmes. Pour ce faire, on a examiné le matériel de cours, activités, devoirs assignés pour la compréhension et la production écrites et orales en anglais, puis on a comparé les exigences requises pour ces tâches en termes de compétence en anglais, aux plages de descripteurs de l'échelle IELTS. Les données proviennent d'entrevues d'étudiants et d'enseignants, d'observations de cours et de séminaires, et de l'examen de documents de cours. Vu le faible nombre de sujets interviewés et la limite de la portée et de l'approfondissement de l'analyse du contenu, les résultats obtenus revêtent une valeur plus indicative que concluante.

## **Determination of Appropriate IELTS Writing and Speaking Band Scores for Admission into Two Programs at a Canadian Post-Secondary Polytechnic Institution**

### **Introduction**

This study aimed to determine the appropriate writing and speaking band scores for the widely-used International English Language Testing System (IELTS), for admission to and success in the Computer Systems Technology (CST) and Computer Information Technology (CIT) programs at a large Canadian polytechnic post-secondary institute. To the extent that those responsible for setting language entrance requirements are not experts in language testing, we wanted our results to be accessible and useful to institutional leaders to help them set language entrance requirements effectively. We conducted an exploratory case study by interviewing students and faculty members, surveying course materials (textbooks, syllabi, assignments, lecture notes), and conducting classroom observations. The results point to a variety of larger-scale research that could be undertaken, and illustrate ways in which decisions about language entrance requirements can be aligned with documented language demands of target programs of study.

### **Defining Non-Native Speaker of English and Language Proficiency**

Since defining a ‘non-native speaker of English’ (NNS) is complex and problematic, we have chosen in this study to define it as those who self-identify as NNS. To enroll at the institute, evidence of proficiency in reading, writing, speaking, and listening in English is required from applicants from countries that are not on the institute’s list of countries where English is the primary language and which have high school grade 12 equivalency with the province. See <http://www.bcit.ca/admission/upgrading/englishproficiency.shtml#table> for that list. The definition of ‘proficiency’ in English varies across programs within the institute. The programs we grouped as a case in this study, CST and CIT, required students to have a C+ grade in grade 12 English or the equivalent. Overall, the institute’s goal is to provide students with “entry-to-practice credentials...that lead to better livelihoods through rewarding careers” (BCIT, 2009, p. 18), and to provide employers with graduates who can “perform at a level that makes them immediately job-ready and valuable” (p. 16). Since the dominant language for employment in the province is English, to be “job-ready and valuable”, graduates must demonstrate sufficient proficiency in English to be immediately employable.

### **Balancing Student Access and Academic Standards**

The increasing number of NNSs enrolling in post-secondary education in Canada has brought a great deal of attention to how to best serve these students. At the same time, institutions must not be seen to be allowing, as Coley (1999, p. 7) points out, the standard of communication to deteriorate or detract from the experience of other students (QAA, 2009, p. 14). This has led to an increasing use of language testing for admission to post-secondary programs. The institution in this study is no different; while the institute does not record students’ ethnic or linguistic background, anecdotal evidence suggests that the student population is currently made up of international students, recent immigrants, and students currently termed ‘generation 1.5’ who were born in Canada, use a home language other than French or English, and only came into extended contact with an official language

at the onset of their formal education. Programs at the institute are eager to enroll students with varied linguistic, academic, professional, and cultural backgrounds (BCIT, 2009, p. 21). Many program administrators struggle with decisions around accepting highly skilled immigrants to the program even though the immigrants may have weak language skills. Refusing them access because of language, despite otherwise outstanding credentials, may seem unfair.

### **The Importance of Setting Language Entrance Requirements Fairly**

The Quality Assurance Agency for Higher Education (2009, p. 12) recommends that institutions need to “provide fair and accurate information to international students (as applicants) about the facilities and support on their campuses”. We would argue that this must in addition include fair and accurate information about the language skills required “to follow their courses and participate fully in campus life” (de Lotbiniere, 2009, p. 2). To be fair to NNS students seeking entry to a program, to other students in the program, and to instructors, we argue that it is important to investigate what language proficiency test scores mean in terms of specific language proficiencies required for success in a program. That task should include both quantitative, psychometric evaluations and qualitative evaluations that include the voices of those affected by the setting of language entrance requirements and cut scores (Shohamy, 2001, p. 7). This study focuses on the qualitative investigation of students’ and instructors’ experiences of language entrance requirements in practice to enhance our understanding of how language proficiency plays out in the classroom and among students who work and socialize together outside the classroom.

A second and more general aim of this study was to design a provisional model for investigating the relationship between test tasks and scores and actual academic tasks in the context of the varied and often specialized courses offered by a technical education institution, this type of setting being less well-represented in testing literature than university or college settings. Our project illustrates a process that administrators could implement without extensive knowledge of psychometrics to make a fair assessment of the language skills required and to translate that understanding into setting cut scores for admission to the programs under consideration.

### **Institutional Context**

The number of NNS students enrolled at the target institution has been increasing (Hamilton, 2005, p. 13), and has led to a need to understand more fully the learning needs of students who identify themselves as NNS. The CST and CIT programs, run through the institute’s School of Computing and Academic Studies, attract a significant number of NNS students. As noted above, demographic information on the language background of students is not collected by the institute, but the majority of instructors we interviewed confirmed that many of their students need language support, and CST/CIT have conducted some pilot programs to that end for NNS students. In addition, the target institution was redesigning its in-house testing process and was interested in how its test scores matched up to some of the major standardized language test scores. For these reasons, it was useful to determine what band score on the IELTS test would be appropriate for entrance into specific programs such as CST and CIT. Because in the first semester of the program the CST and CIT shared roughly 60% of the same courses, and the two differentiated themselves only at a later stage, we treated the two programs in the present study as one

case, and refer to it henceforth as “CST/CIT.” The entrance score on IELTS was currently set at 6 for each of the two programs.

### **Background and Rationale**

While Kerstjens and Nery (2000, p. 93) found IELTS Writing scores correlated more closely, though not statistically significantly, to student GPA in Technical and Further Education (TAFE), overall IELTS was not “a significant predictor of academic performance for the TAFE sample” (2000, p. 105) in their study. They recommend further studies of IELTS’ predictive validity in differing contexts. Although we did not examine predictive validity in the present study, we sought to shed light on what might be the appropriate relationship of proficiency on IELTS test tasks to courses’ language activities.

Choosing appropriate minimum admission scores, or cut scores, is often left to administrators who may know little about language requirements and perhaps even less about the multitude of language tests used and how each test’s scores may be used for different purposes (Coley, 1999, p. 9). In addition, cut scores may be set for political or administrative reasons rather than reasons related to likelihood of students’ success like promoting greater enrollment (Shohamy, 2001, p. 37). Coley’s (1999, p. 9) examination of the English language requirements of Australian universities for non-English speaking students revealed that the number of different language tests causes confusion for admissions boards. Often those setting cut scores did not know what was tested or what an appropriate score ought to be. Coley cites the “unclear and often inaccurate way in which the English language tests/measures were named or cited in the responses” as a “major difficulty with collating the information” she received (1999, p. 9), taking this as evidence that “some universities are not familiar with the actual test results” (1999, p.9).

McDowall & Merrylees’ (1998) research suggests, however, that decision makers do in fact have sufficient knowledge of tests used in their institutions to support admissions decisions; enough that they were aware of predictive validity and noticed patterns and inconsistencies in the reliability of the tests. However, they also acknowledge that since many institutions consult other institutions when setting cut scores, “there could be a strong temptation for each institution to set the policy according to what it perceives the other equivalent universities/colleges have done” (McDowall & Merrylees, 1998, p. 134).

Such practices are problematic because, as some interviewees in the Quality Assurance Association pointed out, target language demands may depend on “the academic context and even the discipline being studied” (2009, p. 13). While only 12% of institutions in their survey stated they relied solely on the cut scores of other institutions, 40% of the institutions surveyed said they relied on consultations with ESL professionals, other institutions, and the literature on setting cut scores. It was not clear whether that literature would have included sources on specific purpose testing, such as Moore and Morton (2005) or Banerjee & Wall (2006).

In addition to the challenge of the number of tests admissions officers have to be familiar with, administrators setting entrance scores face a variety of pressures. Hawkey (2006, p. 129) mentioned competing institutional goals in setting cut scores; while the university wanted higher cut scores “to maintain or raise standards”, departments wanted lower cut scores to “admit students with particularly strong non-linguistic skills”. While the latter may have value, we suggest that evidence be presented to demonstrate that strong non-linguistic skills can compensate for insufficient linguistic skills in specific contexts. As

an alternative to the practice of setting cut scores for administrative reasons, Bachman and Palmer (1996, p. 101) recommend a thorough examination of the target language use (TLU) followed by a comparison between the TLU and any test's tasks in order to determine whether a test's tasks are reasonably congruent to the language use in specific academic or professional/vocational situations (the TLU). In this case, this means the IELTS test's tasks must match the language tasks required in CST/CIT courses at the institute to a reasonable degree. The next step is to determine which IELTS band score describes the level of proficiency required to cope with those context-specific language tasks. Therefore, in this study, we will examine the TLU (language tasks required to be successful in the CST/CIT programs) at the institute and compare it to the IELTS test's tasks and band descriptors. This comparison will make it possible to recommend an appropriate minimum band score for entrance into, and ideally, success in the program. If the cut score is appropriate, then students who meet the minimum requirement should be able to cope with most language tasks posed by the course. On the other hand, if students are unsuccessful, it will not likely be attributable to their language proficiency. In this way, the cut score demonstrates the ethical principle of benefit maximization (Hamp-Lyons, 1997, p. 324); students will not spend time and money in courses they have diminished chances of succeeding in, while other students, faculty and the institution in general need not be concerned that the "standard of communication is deteriorating" (Coley, 1999, p. 7) or the experience of other students is diminished (QAA, 2009).

## Method

### Research Questions & Design

Our questions were:

- 1) Is IELTS an appropriate assessment tool for skills required to meet the language demands posed by the institution's CST and CIT programs? and
- 2) If so, can appropriate Writing and Speaking band scores for entrance into the CST and CIT programs be set by means of a comparison of a course's language tasks' demands and IELTS Band Descriptors? What is an appropriate band score for entrance into CST/CIT?

To get a broad view of the language requirements from a variety of perspectives, we carried out this research as an exploratory case study. By collecting data by multiple means, employing stakeholder interviews, direct observation of instruction, as well as analysis of documents, we were able to take advantage of *methodological triangulation* (Denzin, 2006) to lend credibility to our qualitative findings and our recommendations as to appropriate IELTS band scores. Our findings therefore would "include the perspectives and voices of the people" (Strauss & Corbin, 1994, p. 274) who are most directly affected by admissions testing and decisions that flowed from such testing. Thus, rather than undertaking technical work on the psychometric characteristics of IELTS with this particular population, we chose instead to concentrate our efforts on questions that pertain more closely to construct validity, employing multiple qualitative data sources to do so. This had the advantage of allowing us to examine in closer detail the specific language *tasks* (Long, 1998) entailed in the precise educational settings for which admissions decisions were being made by means of this particular language test.

## The IELTS Test

IELTS has become a prominent English language proficiency test over the past decade. Its aim is to provide a reliable measurement of English language proficiency that is relevant across a broad range of linguistic contexts. The Academic version of the test is widely recognized for admissions purposes by tertiary institutions and professional organizations in English-medium nations. The test covers the four language areas: listening, speaking, reading, and writing. A range of task types attempts to present and elicit language within communicative contexts that resemble informal and formal environments. The Academic version contains material of an academic nature, although content is selected to be non-specialized and culturally relevant across a variety of contexts.

Candidates are assessed on a descriptive scale consisting of “band scores”. These scores aim to describe how effectively a candidate should be able to communicate at a given level of English. Sub-scores for each of the four language areas and an aggregate of the sub-scores are reported. The IELTS organization provides advice to institutions for accepting test scores and establishing cut scores for admission. Of particular interest to the present study, institutions are typically advised to make a careful determination of their language proficiency requirements, and consider using both sub-scores and global scores for selection. We used only the publicly-available IELTS band descriptors, those for Writing ([http://www.ielts.org/pdf/UOBDS\\_WritingT2.pdf](http://www.ielts.org/pdf/UOBDS_WritingT2.pdf)) and Speaking ([http://www.ielts.org/pdf/UOBDS\\_SpeakingFinal.pdf](http://www.ielts.org/pdf/UOBDS_SpeakingFinal.pdf)); the full IELTS Band Descriptors are proprietary and are not used outside the testing context. Nor are Reading and Listening covered on the *IELTS Scores Explained DVD* (UCLES, 2006). Program administrators, therefore, would not have access to information on setting IELTS Reading and Listening cut scores, and hence could not be considered in the present study.

## Interviews

Bachman and Palmer (1996, p. 102) stress the importance of determining target language use (TLU) in collaboration with stakeholders. Therefore, students and faculty members were invited to take part in semi-structured interviews.

### Student interviews.

Four students volunteered to take part in individual half-hour interviews that asked them to describe the language requirements and the major language challenges they faced in their classes (See interview protocol in Appendix A). The interviewees were Adam, a foreign-trained engineer; Tim, an international student; and Jeremy and Justin, both recent graduates of grade 12 in BC. Pseudonyms have been used for the students. Justin spent two years after high school taking language courses to improve his English abilities, and Jeremy speaks mostly Russian at home, but considers himself a native speaker of English. Although Adam had taken IELTS in the past, none of them had entered the CST/CIT programs based on an IELTS score.

### Faculty member interviews.

We interviewed six instructors of courses in the first-term of the target program including two Communication instructors (for both CST and CIT), one Math instructor (for both CST and CIT), one Programming instructor (for CIT) and one Organizational Behaviour instructor (for CIT), along with the program head for the first year of CST/CIT

program, and the instructor for the CST/CIT Co-operative Education placements. In all, seven faculty members participated in interviews that lasted thirty to forty-five minutes (see interview protocol in Appendix B). These participants were also asked to describe the language requirements and the major language challenges students faced in their classes. Following the interview, they were asked to examine two documents and two video clips from the *IELTS Scores Explained* DVD (UCLES, 2006), reading two samples of Academic module Task 2 Writing scripts and judging whether the writing skills demonstrated in the script appeared to be adequate for entry into the CST/CIT programs. The same procedure was carried out with video clips of sample Speaking test interviews.

### **Observations**

Following the interviews, a convenience sample of the programs' lectures (fifty minutes each) and labs (one hour and fifty minutes each) was observed by the first author to provide points of triangulation of the evidence found in the interviews and documents. She observed one Communication lecture and one lab, one Programming lecture and one lab, and one Math lecture and one lab. An open-ended, informal observational checklist included categories that emerged from our preliminary analysis of the student and instructor interviews as well as the typical IELTS language tasks. We then conducted an informal content analysis of the language tasks observed (Weber, 1990).

### **Survey of Course Materials**

We compiled a representative sample of course outlines and schedules, textbooks, assignments, student writing, activities, and lecture notes for each course in CST/CIT. The writing samples provided by instructors included examples of each of three notional levels: failing, bare pass, clear pass. These documents were also submitted to an informal content analysis (Weber, 1990) and then compared to a similar informal content analysis of IELTS Writing descriptors in order to estimate the set of tasks and the skills students would need to be able to successfully use or produce a text. Two of the authors' experience as an IELTS examiner and as an examiner trainer respectively allowed them to assess the IELTS band that the writing samples demonstrated.

## **Findings and Discussion**

### ***Question One: Is IELTS an appropriate assessment tool for skills required to meet the language demands posed by the institution's CST and CIT programs?***

Kerstjens & Nery's (2000, p. 105) finding that IELTS does not have significant predictive validity in Technical and Further Education suggests that an examination of how well IELTS matches the target language use is especially important. A preliminary content analysis of course materials in the early stages of this project compared the types of writing and speaking activities required in CST/CIT to the types of activities required by IELTS, as found in the *Official IELTS Practice Materials* (UCLES, 2005), and the DVD entitled *IELTS Scores Explained* (UCLES 2006). This revealed that the CST/CIT tasks were sufficiently similar to IELTS tasks that IELTS could be considered a useful measure of language for these tasks.

## Writing Tasks in IELTS and the CST/CIT Programs

In Task 1 of the IELTS Writing test, candidates are required to describe, in their own words, information from a given graphic. That could include organizing, presenting, and comparing data; describing the stages of a process or procedure; describing an object, event, or sequence of events; or explaining how something works. In Task 2, candidates are given a prompt with a point of view, argument, or problem to which they are required to respond in essay format. Essays could present a solution to a problem; present and justify an opinion; compare and contrast evidence, opinions, and implications; or evaluate and challenge ideas, evidence or an argument (UCLES, 2006).

Our informal content analysis of the course materials across courses showed that very little writing was required in many CST/CIT courses (a sentence or two on an assignment). In fact, in response to our recruiting requests, many of the Programming and Math courses' instructors said they had not responded to requests for participants because they believed they had nothing to contribute because the communication skills required to successfully complete their courses were negligible. In contrast, in the Communication and Business courses, our survey of course materials revealed that students were required to produce significant amounts of writing: content analyses of the two syllabi showed that 85% of a student's mark in Communication was based on written work (letters, memos, and instructions), and approximately 60% in Business.

Communication was the most writing-intensive course. According to the survey of course materials, students were required to write simple workplace messages with an emphasis on writing messages that were "clear," "concise," "correct," and "focused on the audience and purpose." Developing "good document design skills" (using lists, headings, etc. for improved reader access) was also mentioned in the materials. While these tasks represented writing in a different register from those revealed by our task analysis of the IELTS essay and its published descriptors, many of the same underlying skills appeared to be required for success in the tasks found in the course materials and those entailed in the IELTS essay task. These included addressing a specific task fully, presenting information coherently, and crafting clear and correct sentences. Many types of writing on the IELTS Writing test were covered, according to the course syllabus, in term two of the Communication course when the students would write short business reports.

Our analysis of course materials indicated that the writing tasks required in the Business course matched the types of writing found in the IELTS Writing Task 2 more closely. For example, in one course assignment in our sample of materials, students were to respond to a case by "analyzing problems and suggesting solutions." This assignment also required that students "provide evidence" to "support their analysis of the problem" and "justify their suggested solution". Similarly, in another assignment in the sample, students worked in teams to produce a 16-page formal report describing and analyzing "one of Canada's well-managed companies". Table 1 compares what we judged were the closest-fitting IELTS Writing task requirements with CST/CIT Business and Communication course requirements respectively.



Table 1: Comparison of IELTS Writing Task 2 requirements and the CST/CIT Business and the CIT/CST Communication course writing requirements

IELTS Writing Task 2	CST/CIT Business course	CST/CIT Communication course
<ul style="list-style-type: none"> <li>• present a solution to a problem</li> <li>• present and justify an opinion</li> <li>• compare and contrast evidence, opinions, implications</li> <li>• evaluate and challenge ideas, evidence or an argument (UCLES, 2006)</li> </ul>	<ul style="list-style-type: none"> <li>• identify symptoms of a problem</li> <li>• link facts in a given case to the main symptoms of a problem</li> <li>• analyze problems and suggest solutions</li> <li>• provide evidence to support their analysis of the problem</li> <li>• justify their suggested solution</li> <li>• describe and analyze one of Canada's well-managed companies</li> </ul>	<ul style="list-style-type: none"> <li>• write a persuasive letter that develops at least three reader benefits</li> <li>• write emails and memos that present an idea and focus on achieving specific results</li> </ul>

### Speaking Tasks in IELTS and in CST/CIT Courses

The importance of teamwork, class participation, and oral presentation skills at the institute made speaking skills crucial, according to course syllabi and assignments in our sample of course materials. The Business courses' syllabi revealed that 40% of a student's grade came from team-based assignments, class participation, and oral presentations. Our analysis of five other course syllabi obtained across the programs showed that from 5% to 20% of the course grade came from these activities. In one course, Human-Computer Interaction, these activities did not form part of the explicitly-stated course grade in the syllabus, but other course materials showed that students were organized into teams for lab work. Math was the only course whose course materials did not reveal a requirement for any of these activities, yet in the observations we carried out both of a lecture and a lab session, students were seen collaborating orally on activities.

In the IELTS Speaking test, candidates often must provide personal and non-personal information, express opinions and preferences, justify opinions, repair conversation, explain, suggest, speculate, compare and contrast, summarize, narrate, paraphrase, and analyze (Cambridge University, 2006). These are all functions students would be required to perform in order to participate successfully both in team and in more informal class settings. Table 2 compares IELTS Speaking tasks with CST/CIT course requirements.

Table 2: Comparison of IELTS Speaking tasks and CST/CIT tasks

IELTS Speaking tasks	CST/CIT Speaking tasks
<ul style="list-style-type: none"> <li>• provide personal and non-personal information</li> <li>• express opinions and preferences</li> <li>• justify opinions</li> <li>• repair conversation</li> <li>• explain</li> <li>• suggest</li> <li>• speculate</li> <li>• compare and contrast</li> <li>• summarize</li> <li>• narrate</li> <li>• paraphrase</li> <li>• analyze (UCLES, 2006).</li> </ul>	<ul style="list-style-type: none"> <li>• participate in team discussions</li> <li>• collaborate with classmates in labs</li> <li>• "express their own ideas" and "share their knowledge and opinions" (Tim)</li> <li>• "talk about what needs to be done and delegating of different activities, like assigning different people what to do" (Justin)</li> </ul>

Based on the comparisons between spoken task requirements set out in course materials and observations and those set out for the IELTS writing and speaking tasks, we concluded that there was sufficient match between the types of tasks. This led us to the conclusion that IELTS could indeed be regarded as an appropriate tool to assess candidates' abilities to meet the written and spoken demands of the CST and CIT programs, to the extent that we were able to sample these demands from the survey of course materials and observations of classroom and lab activity.

***Question Two: Can appropriate speaking and writing band scores for entrance into the CST and CIT programs be set by means of a comparison between a course's language tasks' demands and IELTS Band Descriptors?***

### **Defining 'Success' in the Program**

As stated earlier, to determine the appropriate band score for entrance into CST or CIT at the institute, this project investigated what the scores meant in terms of real language proficiency required for *success* in a program. As Shohamy (2001) argues, ethically-set test cut scores should reflect the level of language for academic success. Further, success might also include effective participation in academic and campus life (de Lotbiniere, 2009). Therefore, we began interviews with students and faculty members by asking for their definition of success in the program, and received both numerical estimates and more holistic descriptions.

#### **Numerical scores.**

In terms of their numerical estimates, no students or faculty member mentioned achievement of a passing grade (50%). One student, Justin, suggested an overall average of 70% could be considered a success since 70% was the required average for participation in the co-operative education program. Jeremy said to be considered successful, a student would need to get above 75%, and a student with less than 60% was just "coping". Faculty members generally agreed that while 50% technically represented completion of a course, it

did not indicate success, or mastery of the material. One instructor stated that a mark below 55% indicated that a student was “actually failing the course largely” and “scraping by and not getting the material.” Two faculty members suggested that a score of 65% represented success, and another said that a student achieving a ‘B’ (75%) and above could be considered successful.

### **Holistic definitions.**

The holistic definitions of success provided by the interviews included being able to communicate with classmates and instructors and to fully participate in classes in order to gain some real working knowledge to take away and apply to workplace practice. For example, one student, Adam, said he did not “want to put it in a way of how many points I score”, but described success as follows: “I understand what the teacher is talking about, and I turn that instruction into my own knowledge and I can use it in my real work...I get real knowledge I can use in the future, not just all those notes”. Justin said being able to express yourself and work in teams were marks of success and noted the importance of intercultural communication: “You should be able to work with different cultures, to interact with people from different backgrounds, and be able to understand that different people think differently”. Further down his list of competencies that demonstrated success were strong computing and logic skills. Tim said focusing on grades was a source of stress because he could not “overcome the huge gap between [him] and the Canadians”. Measuring success using grades was not helpful to him, so instead, he measured it in terms of what he had learned. Faculty members saw students as successful if they could ask intelligent questions, solve problems, follow instructions accurately, and demonstrate attention to detail. One faculty member emphasized that being able to take the information from various sources (lectures, labs, textbooks, etc.) and put it together to “build a picture” was also indicative of success. This aligned with Adam’s comment that turning instruction into his own knowledge represented success. Rather than commenting on specific language skills required for success, the instructors focused on critical thinking and problem solving skills. Like Justin, they were generally more concerned with clear expression of ideas rather than native-speaker-like English skills. For example, most instructors mentioned that students needed to be able to ask intelligent questions that demonstrated flexible use of vocabulary, rather than grammatically accurate questions.

These definitions of success suggested that when deciding on the minimum test band score required for admission to CST/CIT, it is insufficient to select the minimum score needed to simply pass the course with 50%. Rather, participants argued that students should be admitted to the program with sufficient English skills to participate fully in their classes and in student life.

### **Faculty and Student Perceptions of the Writing Demands of Their Courses**

While the Communication course was cited by all the instructors interviewed in the CST/CIT programs as one of the most challenging in terms of writing requirements, none of the students mentioned they found it particularly difficult. In fact, Justin said he found the Communication and Business courses to be “the easiest” from the writing standpoint. When the students were asked what they found most difficult, some of them did mention specific courses, but all four of them mentioned learning new technical vocabulary and incorporating it into their writing well as specific challenges. As Adam said, “For certain

types of things, you just need certain types of words. Even though there are many words which can carry similar meanings, under certain circumstance just one or two words may be the best.”

### **Writing in the Communication, Business, Mathematics and Programming Courses.**

To be successful in the Communication course, our interviews and the analysis of the course materials we surveyed indicated that students were expected to write clearly and concisely, use an appropriate tone for the audience, and demonstrate the ability to use a variety of structures while maintaining grammatical accuracy. Comparing these expectations to the descriptions set for Lexical Resource and Grammatical Range & Accuracy in the IELTS Writing Band Descriptors: Task 2 (public version) (UCLES, 2006) we considered the descriptors for a band 7 score to provide the best match to program expectations. To satisfy the Task Response and Coherence & Cohesion descriptors, a score of 6 would be acceptable. Therefore, students entering Communication with a Writing score of 6.5 would arguably be adequately prepared for the demands of the course. The Communication instructors, after looking at the public IELTS Writing band descriptors, indicated in the interviews that a score between band 6 and band 7 would be acceptable. We compare a summary of the Communication course’s writing expectations with selected features of the Band 7 descriptors for the two writing skill areas in Table 3 below. The full set of IELTS descriptors are found at [http://www.ielts.org/pdf/UOBDS\\_WritingT2.pdf](http://www.ielts.org/pdf/UOBDS_WritingT2.pdf).

Table 3: Comparison of relevant IELTS band descriptors and CST/CIT Communication course writing requirements

IELTS Writing band descriptors (band 7)	CST/CIT Communication course
Task Response: <ul style="list-style-type: none"> <li>addresses all parts of the task</li> <li>presents a clear position throughout the response</li> </ul>	<ul style="list-style-type: none"> <li>anticipates and answers readers’ questions</li> <li>focuses on the audience and purpose</li> <li>develops ideas with concrete and specific details</li> </ul>
Coherence and Cohesion: <ul style="list-style-type: none"> <li>logically organizes information and ideas</li> <li>presents a clear central topic within each paragraph</li> </ul>	<ul style="list-style-type: none"> <li>organizes information clearly and logically</li> <li>uses short, unified, coherent paragraphs</li> <li>uses transitions between sentences, paragraphs, and sections</li> </ul>
Lexical Resource: <ul style="list-style-type: none"> <li>uses a sufficient range of vocabulary to allow for some flexibility and precision</li> </ul>	<ul style="list-style-type: none"> <li>uses clear, concise, concrete, specific wording</li> </ul>
Grammatical Range and Accuracy: <ul style="list-style-type: none"> <li>has good control of grammar and punctuation but may make a few errors</li> </ul>	<ul style="list-style-type: none"> <li>uses correct grammar, punctuation, and spelling</li> </ul>

The Business course required students to write two short papers (three to four pages) individually and a longer (1500 word) report in groups. Grading criteria found in the syllabus and assignment guidelines indicated that these papers would be evaluated on how clearly and logically the student developed an argument, revealing relatively little emphasis

on grammar and mechanics. Since clearly and logically developing an answer were stated in the materials as critical criteria for success, we judged that the qualities described in the Task Response and Cohesion and Coherence descriptors would be the closest comparator and of most relevance to the Business instructor. We found on comparing the IELTS descriptors that those set out for a band score of 7 in these areas would provide the best match. The Lexical Resource and Grammatical Range & Accuracy criteria might have been slightly less important to the instructor, since we noted that grammar and spelling errors were given relatively little weight in the course materials we saw (only 5% of the student's final course grade), despite the fact that the instructor reported in the interview that he stressed to his students that "you have to have something presentable because [your employer/colleagues will] think your idea is bad if your grammar is bad". Our comparative analysis of IELTS descriptors and the stated course writing demands led us to judge that a band score of 6 in these areas would be sufficient for success in the course, with an overall score of 6.5 as the minimum acceptable score. Our comparative analysis is summarized in Table 4.

Table 4: Comparison of relevant IELTS band descriptors and CST/CIT Business course writing requirements

IELTS Writing band descriptors	CST/CIT Business course requirements
Task Response (band 7) <ul style="list-style-type: none"> <li>• presents a clear position throughout the response</li> <li>• presents, extends, and supports main ideas, but there may be a tendency to over-generalize and/or supporting ideas may lack focus.</li> </ul>	<ul style="list-style-type: none"> <li>• deals with all major issues and explains, analyzes, or evaluates the problems</li> <li>• presents a clearly and logically developed answer</li> <li>• uses key terms correctly</li> <li>• grammatically correct</li> </ul>
Coherence and Cohesion (band 7) <ul style="list-style-type: none"> <li>• logically organizes information and ideas; there is a clear progression throughout</li> </ul>	
Lexical Resource (band 6) <ul style="list-style-type: none"> <li>• uses an adequate range of vocabulary for the task</li> <li>• makes some errors in spelling and/or word formation, but they do not impede communication</li> </ul>	
Grammatical Range and Accuracy (band 6) <ul style="list-style-type: none"> <li>• makes some errors in grammar and punctuation but they rarely reduce communication</li> </ul>	

Students appeared to need very little writing in their Mathematics course, involving at most occasional one- or two-sentence conclusions, according to the interview with the

instructor. While the instructor corrected spelling, he did not deduct marks for it. Therefore, we judged that students with a band score of 5 (or perhaps even lower) would likely be able to succeed in this course as long as they had the requisite math skills. See [http://www.ielts.org/pdf/UOBDS\\_WritingT2.pdf](http://www.ielts.org/pdf/UOBDS_WritingT2.pdf) for a full description of that band.

In Programming courses, course materials showed that students were required to write short answers on tests, or short progress reports (100 words each) on team projects. Most writing, however, consisted of “comments” in their programs, designed to give other programmers brief explanations of what the programming code is intended to do. According to the Programming instructor,

If the program works then, wonderful, but if it doesn't then we need to go through it and try to figure out where they made a mistake...Very often if it's not commented, who knows what's going on? If they are commented, but it is really hard to follow, that's a problem.

Justin felt that while Communication and Business writing demands were “very straightforward”, writing program comments for programming courses “can be very complicated because we have to know a lot of vocabulary.” He found:

[Putting the new vocabulary into grammatically accurate] sensible sentences can be challenging because you have to be able to understand the vocabulary before you write. And the understanding part takes a while. Most students struggle with understanding the concepts. Therefore, it's hard for them to put it into writing.

Jeremy's observations differed: he felt writing the program comments simply required that they “implement the technical terms [they'd] learned”. Since students were not evaluated directly on the quality of their writing, we concluded that a band score of 5 would probably suffice for success in Programming courses. The results of that comparison of this course's writing demands and selected descriptors for IELTS band 5 are shown in Table 5.

Table 5: Comparison of relevant IELTS band descriptors and CST/CIT Programming course writing requirements

IELTS Writing band descriptors (band 5)	CST/CIT Programming course requirements
Coherence and Cohesion <ul style="list-style-type: none"> <li>• may not write in paragraphs</li> </ul>	<ul style="list-style-type: none"> <li>• write short “comments” on programs, using technical terms, to describe the intended function of the programming code</li> <li>• “comments” should be understandable, but no marks are assigned based on the quality of the language</li> </ul>
Lexical Resource <ul style="list-style-type: none"> <li>• uses a limited range of vocabulary, but this is minimally adequate for the task</li> </ul>	
Grammatical Range and Accuracy <ul style="list-style-type: none"> <li>• uses a limited range of structures</li> </ul>	

### **Sample IELTS Writing scripts.**

At the end of the interviews, we showed faculty members and students two samples of candidate scripts, Scripts I (rated band 5) and J (rated band 7), from the *IELTS Scores Explained* DVD (UCLES, 2006). We asked faculty members and students to comment on whether someone writing at each of the two levels would be able to succeed in their course. Interviewees were not told in advance what band score these samples represented.

Script I (band 5) was seen by Programming and Mathematics instructors to represent what they termed an “acceptable” level of writing for their own courses, but their interviews indicated that they felt that this level would not be acceptable in the Communication course. The Mathematics instructor said this level of writing would be acceptable because “they can get their point across, even if it’s grossly misspelled and has bad grammar running amok through it”. However, he also noted someone with this level of writing would “run into a lot of trouble and end up hating the COMM [Communication] instructor. The usual”. The Business instructor, the Co-operative Education instructor, and one of the students, Justin, agreed that the writer of Script I might be able to cope in the program. They all expressed reservations about this writer’s abilities, but as the Business instructor said, “I think [the writer was] getting the meaning but expressing it in not the best manner” since in his view ideas were not fully explained. He felt this writer would be able to complete his course because he believed instructional feedback on a piece of writing like this would allow the writer to improve and hand in more satisfactory assignments in the future. The grammar errors were not an issue: “I don’t care about the grammar. It’s the idea, the concept. What’s your point with it?”. The Communication instructors and most of the students agreed that someone at this level would not be successful in the program, specifically in Communication. Adam summarized: “If the instructor wants to see perfect grammar, various structures, and well developed ideas, this person has nothing, very simple structures”. Adam and Tim said they would not want to work in groups with someone at this level because, in Tim’s words “if he communicates like this in his team, I would have to ask a lot of questions and it makes other people very tired”.

All the student and faculty interviewees judged Script J (band 7) acceptable for the program. They indicated the complexity of the vocabulary, the development of ideas, and the minimal grammar errors made Script J stand out for them as an example of acceptable writing skills. Interestingly, however, the Co-operative education instructor believed this script demonstrated a lower level of ability than Script I, and felt that this candidate would find the Co-operative Education course challenging.

### **Writing: Summary.**

For most courses, our comparative analyses suggest that students could succeed with fairly low levels of writing skills. Communication and Business courses required significantly stronger skills however, and other faculty members, including the program head for first-term CIT, indicated in the interview that students would not be ready for the workplace with low writing skills. Based on the relatively higher requirements that emerged from the comparative analyses in Communication and Business courses, we judged that a Writing band score of 6.5 appears to be the minimum acceptable band score for entrance into the programs.

## **Faculty and Student Perceptions of the Speaking Demands of their Courses**

The value placed on teamwork at the institute as reflected in course materials we surveyed meant that speaking skills were important to students' success in the program, even if these were not formally evaluated by their instructors. If students lacked sufficient spoken communication skills, they were unlikely to be able to participate fully with their teams. As Jeremy noted, if students have difficulty making themselves understood they "might feel intimidated by the group and not put in as much". Students who are not felt to have participated as fully as others may get their "marks lowered by the group members themselves", he reported in the interview. Faculty members and students also noted in their interviews that "weak speaking skills" (in addition to "cultural differences") may make students less likely to go to their instructors or other classmates for extra help. As Jeremy said, communicating informally with instructors is "a major factor in success because if you're not understanding something in class, or you need help with a project, the number one place you should go is to the teacher". Adam found speaking with instructors was, in fact, easier than speaking with his peers: "I always prepare my questions in advance. And also, that conversation typically won't last very long. I ask one or two questions and leave".

### **Speaking in the Communication, Business, Mathematics and Programming courses.**

Communication course materials stated that students were required to give eight- to ten-minute individual formal presentations worth 10% of their course grade as well as short presentations (ungraded). In the lab we observed, the small-group discussions appeared to us to have required fairly sophisticated language skills; students were given a text and asked to reformat it using paragraphing, headings, lists, white space, bold, and other graphic elements. Since this could be done a variety of ways, students in each group were required by the assignment to negotiate and argue for what they felt would be the best approach to this task.

Students indicated in the interviews that Business courses had the most challenging speaking requirements, reporting that they were evaluated on their spoken participation (10% of the overall course mark as shown in the syllabus). One Business course's syllabus required students to give team presentations of up to 20 minutes in length and noted that in addition to delivering the class presentation, students had to communicate with their teammates to prepare the presentation. Therefore, we judged that speaking skills played a significant role in student success in these courses. As with the COMM course, these tasks appear to map most closely onto the IELTS Speaking descriptors for band 6. Our comparative summary of the reported speaking demands of the Communication and the Business courses respectively and descriptors selected from Band 6 of the IELTS guide is set out in Table 6.



Table 6: Comparison of relevant IELTS band descriptors and CST/CIT Communication and Business course speaking requirements

IELTS Speaking band descriptors (band 6)	CST/CIT Communication course requirements	CST/CIT Business course requirements
<p>Fluency and Coherence</p> <ul style="list-style-type: none"> <li>is willing to speak at length, though may lose coherence at times due to occasional repetition, self-correction or hesitation</li> </ul> <p>Lexical Resource</p> <ul style="list-style-type: none"> <li>has a wide enough vocabulary to discuss topics at length and make meaning clear in spite of inappropriacies</li> </ul> <p>Grammatical Range and Accuracy</p> <ul style="list-style-type: none"> <li>may make frequent mistake with complex structures, though these rarely cause comprehension problems</li> </ul> <p>Pronunciation</p> <ul style="list-style-type: none"> <li>can generally be understood throughout, though mispronunciation of individual words or sounds reduces clarity at times</li> </ul>	<ul style="list-style-type: none"> <li>develop and deliver an 8- to 10-minute individual oral presentation</li> <li>develop main points with specific information and examples</li> <li>use effective transitions</li> <li>use appropriate language</li> <li>speak clearly, using correct grammar</li> </ul>	<ul style="list-style-type: none"> <li>able to verbally provide their analysis of case studies when called upon in class</li> <li>able to explain concepts put forward by the authors of assigned readings in class</li> <li>provide verbal critiques of presentations given by other students in class</li> <li>in teams, discuss and constructively appraise the contributions of teammates, providing feedback on strengths and weaknesses</li> <li>develop and deliver a 20-minute team presentation</li> </ul>

While speaking skills were not shown to be formally evaluated in the Math and Programming course syllabi, it appeared that they could influence a student's performance in the course, since our classroom and lab observations showed that discussions were a frequent feature of instruction and presumably were intended to play a role in students' overall success in these two sets of courses. For example, in the Math lab we observed people worked quietly on their own for a period of time and then, without prompting, worked in pairs to compare answers and ask questions. When the instructor brought the class back together to take up the activity, he asked questions to elicit information from the students (e.g., "What do I need to do here?", "What other ways could you do this?") and continued to encourage them to respond. This demonstrated the importance to the instructor of getting verbal feedback from the students to ensure they all understood the math.

In the Programming lab, we observed students discussing their tasks in pairs and small groups. None of the discussion appeared to have been organized by the instructor –

the students had just chosen to work together and help each other. At one point, a group of students who had been working on a programming problem together in Mandarin sent one of the group members to talk to the instructor. Once that group member had opened the discussion with the instructor, we observed the others follow him to the front of the room and listen in. Although speaking was not formally assessed according to the course materials we reviewed, the ability to speak to other students and the instructor comfortably was noted by instructors and students in the interviews as an important factor for success in the course. In both Math and Programming, our comparative analysis suggested that an IELTS Speaking score of 5 would likely be sufficient for success. The comparative analysis is summarized in Table 7.

Table 7: Comparison of relevant IELTS band descriptors and CST/CIT Math and Programming course speaking requirements

IELTS Speaking band descriptors (band 5)	CST/CIT Math course requirements	CST/CIT Programming course requirements
<p>Fluency and Coherence</p> <ul style="list-style-type: none"> <li>• produces simple speech fluently, but more complex communication causes fluency problems</li> </ul> <p>Lexical Resource</p> <ul style="list-style-type: none"> <li>• manages to talk about familiar and unfamiliar topics but uses vocabulary with limited flexibility</li> </ul> <p>Grammatical Range and Accuracy</p> <ul style="list-style-type: none"> <li>• produces basic sentence forms with reasonable accuracy</li> <li>• uses a limited range of more complex structures, but these usually contain errors and may cause some comprehension problems</li> </ul>	<ul style="list-style-type: none"> <li>• work in pairs to compare answers and ask questions</li> <li>• informally answer instructor's questions and provide verbal feedback</li> </ul>	<ul style="list-style-type: none"> <li>• comfortably speak to students and instructor about course concepts</li> </ul>

### **IELTS Speaking samples.**

At the end of the interviews, we showed faculty members and students video recordings with transcripts of two IELTS Speaking interviews for candidates G and H, illustrating performances at bands 5 and 6 respectively, from the *IELTS Scores Explained* DVD (UCLES, 2006). After viewing candidate G's performance, (band 5) three faculty

members (the Programming instructor, Co-operative Education instructor, and the program head for first-year CIT) judged that this candidate would be able to handle the demands of their courses. The Math and Business instructors were more reserved and thought candidate G would be borderline. The Math instructor believed as long as candidate G's math skills were strong, his speaking skills would not hinder his performance in the class. The Communication instructors were very quick to say this candidate did not demonstrate sufficiently strong speaking skills to be successful in their course. The student interviewees' responses were similar to those of the faculty members: Adam felt that aside from Communication and Business, candidate G's success would not be hindered by his speaking skills. Jeremy and Justin felt candidate G's skills were borderline, mentioning the difficulty he would have in teams and that he would "hardly make it to graduate the CST course". Candidate H's performance, (band 6) was assessed by all students and most instructors to be acceptable.

### **Speaking: Summary.**

The emphasis on teamwork found both in the institutional culture and in the course materials we were able to survey implies that strong speaking skills remained crucial to student success in the two programs we studied. While Math and Programming instructors reported that minimal speaking was required in their classes, the importance of the ability to interact informally with other students and faculty members made speaking skills significant in students' experience and, ultimately, success in the program. The data indicated that students needed to be able to get ideas across clearly and confidently in a variety of situations ranging from one-on-one conversations with instructors, to group discussions with classmates, to formal oral presentations. However, while ideas must be conveyed clearly, faculty members and students indicated it was not necessary for communication to be free of errors or occasional dysfluencies. Overall, our course-by-course comparative analyses led us to conclude that a student would need a Speaking band score of 6 to participate successfully in these programs. Key features of band 6 that demonstrate this are being willing to speak at length; having the vocabulary to discuss topics at length and make meaning clear; making grammatical mistakes that cause few comprehension problems; and being able to be understood despite mispronunciation of individual words or sounds that reduces clarity at times.

### **General Conclusions**

In this study, we set out to determine first whether IELTS was an appropriate measure for assessing applicants' likelihood of meeting the written and spoken language demands of the CST/CIT programs at the Canadian polytechnic post-secondary institute we studied, and second, whether it was possible to set appropriate Writing and Speaking band scores for entry into, and success in at least the initial terms of the CST and CIT programs by means of a systematic comparison of each course's written and spoken tasks' demands and the corresponding IELTS Band Descriptors. We also argued that it was important to ask stakeholders how they defined success in the program before determining the required band scores. The stakeholders clearly indicated that success did not mean barely passing a course, but rather, participating fully in courses, contributing fully to their teams for the numerous team-based assignments, and interacting with other students and instructors to get the most from the learning experience. The broad definition of success revealed in our

interviews meant that employing only the language tasks shown in syllabi to be evaluated by instructors to determine the band score requirements was not sufficient for an effective assessment process; what was required in addition was extensive inquiry with instructors and students to obtain a finer-grained picture of the written and spoken demands of their courses within the two programs.

### **Band Score Requirements**

Overall, our findings suggested that an appropriate aggregate band score on the IELTS for entrance into CST/CIT at the institute would be 6.5:

- Our comparative analyses suggested that a Writing score of 6.5 would be required to meet the standards for professionalism in Communication.
- Similarly, the analyses suggested that a Speaking score of 6 would be required to contribute fully in group work and in teams to complete assignments in many classes.

The confidence with which we propose this aggregate band score was limited however by our inability as noted to survey reading and listening skills in the program and within IELTS. While it appeared that an overall score of 6.5 would be acceptable, the sub-skill ratings must also be considered. For example, if students were to gain admission based on an overall score of 6.5 but had lower Reading scores (5.5 or 6, for example), the overall score of 6.5 may not be sufficient for success. For the language entrance scores required for admission to be predictive of success in the program and, therefore, the most ethically-derived, administrators must take sub-skill scores into account when setting the language entrance requirements. This could be done, perhaps, by requiring that no sub-skill band be less than 6, for example, in this setting.

### **Implications for Further Research**

As mentioned earlier, because of limitations in scope of this study, the results should be seen as indicative, not conclusive. To validate the band scores that emerged from the current study's approach, and to improve upon the approach, further study is required. First, recruiting students who had recently sat the IELTS Academic Module would provide an opportunity to ask students who had achieved the recommended IELTS bands (as well as students who achieved one band above and one band below) to complete activities and assignments in CST/CIT and ascertain their degree of academic success. Second, to test this study's claim that IELTS is a suitable measure of language skills for this setting, studies of predictive validity should be carried out. This is particularly important since Kerstjens and Nery (2000, p. 105) found that IELTS had more predictive validity in Higher Education than in Technical and Further Education. Third, we were unable to discuss language requirements and expectations with representatives from the industry sector. However, because students' language levels upon entering the program might differ from their levels at the end of the program, or even at the end of the first term, the language requirements for entering the program may be quite different from industry language requirements. Nonetheless, industry's views, especially those of companies employing students in the Co-operative Education program, constitute a worthwhile component of any future study. Fourth, because we were unable to employ our comparative analytic approach to Reading and Listening skills that were entailed in the IELTS test, it would be important to

eventually obtain publicly-available documentation from IELTS to ascertain our approach's generalizability across all four language skills.

### **Implications for Institutional Assessment Policy and Practices**

The present study underlines the value of talking to all stakeholders in the establishment of language proficiency criteria for admissions and placement, not just instructors or administrators of programs. If "being able to participate fully in college life" is important, and if students are expected to work with their classmates to achieve course objectives, then we must consider students' perceptions of the language level required. A great deal of what constitutes success comes from activities beyond what an instructor sees and evaluates. Further, our study, although constrained in scope by the inability to study Reading and Listening skills, suggests that it is insufficient for institutions to employ overall test scores alone in their admissions decisions: it is probably important to take subscores into account in decision making. Finally, our study raises questions surrounding ethical conduct of institutions in their efforts to provide, in the QAA's terms, "fair and accurate" information to their applicants on the one hand, while setting admissions and placement cutoffs that predict student success. At a minimum, it is incumbent upon institutions to develop accurate accounts of actual language demands of their programs and courses and give these highest priority when setting admissions and placement criteria.

### **Note**

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### **References**

- Bachman, L.F., & Palmer, A. (1996). *Language testing in practice*. Oxford, UK: Oxford University Press.
- Banerjee, J., & Wall, D. (2006). Assessing performances on pre-sessional courses: developing a final assessment procedure. *Journal of English for Academic Purposes*, 5, 50-69.
- British Columbia Institute of Technology (BCIT). (2009). British Columbia Institute of Technology 2009-2014 strategic plan. Retrieved from <http://www.bcit.ca/files/about/pdf/stratplan.pdf>
- Cambridge University. (2006). *Cambridge IELTS 5: Examination papers from University of Cambridge ESOL examinations: English for speakers of other languages*. Cambridge, UK: Cambridge University Press.
- Coley, E. C. (1999). The English language entry requirements of Australian universities for students of non-English speaking background. *Higher Education Research & Development*, 18, 7-17.

- de Lotbiniere, M. (2009). UK universities 'failing on entry tests'. *The Guardian Weekly*, June 19-25, p.2.
- Denzin, N. (2006). *Sociological methods: A sourcebook*. Piscataway, NJ: Transaction.
- Hamilton, D. (2005). *Graduate communication skills survey*. Unpublished manuscript, British Columbia Institute of Technology, Burnaby, BC.
- Hamp-Lyons, L. (1997). Ethics in language testing' In C. Clapham & D. Corson (Eds.), *Encyclopedia of language and education, volume 7: Language testing and assessment* (pp. 323-333). Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Hawkey, R. (2006). *Impact theory and practice: Studies of the IELTS test and ProgettoLingue 2000*. Cambridge, UK: Cambridge University Press.
- Kerstjens, M., & Nery, C. (2000). Predictive validity in the IELTS test: A study of the relationship between IELTS scores and students' subsequent academic performance. *IELTS Research Reports*, 3, 85-108.
- Long, M. H. (1998). Focus on form in task-based language teaching. *University of Hawai'i Working Papers in ESL*, 16, 49-61.
- McDowall, C., & Merrylees, B. (1998). Survey of receiving institutions' use and attitude to IELTS. *IELTS Research Reports*, 1, 116-139.
- Moore, T., & J. Morton. (2005). Dimensions of difference: Academic writing and IELTS writing. *Journal of English for Academic Purposes*, 4, 43-66.
- Quality Assurance Agency for Higher Education (QAA). (2009). *Thematic enquiries into concerns about academic quality and standards in higher education in England* (Final report). Gloucester, UK: Quality Assurance Agency for Higher Education. Available: <http://www.qaa.ac.uk/Publications/InformationAndGuidance/Documents/FinalReportApril09.pdf>
- Shohamy, E. (2001). *The power of tests: A critical perspective on the uses of language tests*. Harlow, UK: Longman.
- Strauss, A., & Corbin, J. (1994). Grounded theory methodology: An overview. In N. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 273-285). Thousand Oaks, USA: Sage.
- University of Cambridge Local Examinations Syndicate (UCLES). (2005). *Official IELTS practice materials*. Cambridge, UK: Cambridge University Press.
- University of Cambridge Local Examinations Syndicate (UCLES). (2006). *IELTS scores explained*. (DVD). Cambridge, UK: Cambridge University Press.
- Weber, R. P. (1990). *Basic content analysis*. Newbury Park, USA: Sage.

### Appendix A: Student Interview Questions

1. Did you need to take a language test to gain entrance to the program? If yes, what was the test? (e.g. COMM 0015/0033, IELTS, TOEFL etc)
2. If you took IELTS, please state
  - Where you took it: \_\_\_\_\_
  - When you took it: \_\_\_\_\_
  - What score you received (if known)
    - Overall: \_\_\_\_\_
    - Speaking: \_\_\_\_\_
    - Listening: \_\_\_\_\_
    - Reading: \_\_\_\_\_
    - Writing: \_\_\_\_\_
3. What other language proficiency tests have you taken? How many times did you take each test?
4. Did you complete your secondary education in English?
5. Do you use English as your primary language now? (at home, work, school)
6. If not, a) what is language do you use the most? \_\_\_\_\_
  - b) where and how often do you use English? \_\_\_\_\_
7. Describe your previous education.
8. How would you define being successful in your courses at [the institute]? What does 'success' look like for you?
9. In your classes at [the institute], what kind of documents do you have to write? How difficult would you say each type is? What makes them difficult/not difficult?
10. What kind of speaking tasks do you have to do? Consider those that are formally evaluated by your instructor, informal conversations with your instructor, speaking with your classmates either informally or to complete assignments. How difficult would you say each type is? What makes them difficult/not difficult?
11. Now, I'm going to show you two writing tasks and sample scripts from IELTS candidates. After you read through each one, I will ask you a few questions:
  - a. Would someone at this level of ability (upon entry into the program) likely be able to cope with the language tasks in your class? Why?
  - b. What about the writing do you think would make him/her able/unable to cope?
  - c. Do you have any other comments on this script? Would you make any recommendations to this student?
12. Now, I'm going to play two sample speaking performances from IELTS candidates for you. After listening each one I will ask you a few questions:
  - d. Would someone at this level of ability (upon entry into the program) likely be able to cope with the language tasks in your class? Why?
  - e. What about the candidate's English do you think would make him/her able/unable to cope?
  - f. Do you have any other comments on this sample speaking test? Would you make any recommendations to this student?

### Appendix B: Faculty Member Interview Questions

1. What course(s) do you teach?
2. How long have you taught CIT/CST students?
3. What types of writing are students in your course required to complete? (e.g. short answers, connected paragraphs, reports/proposals)
4. What tasks do student in your course have to do to complete written assignments? (e.g. report data, interpret data, evaluate information/opinions, compare/contrast information/opinions, classify information, describe cause & effect relationships)
5. What are some typical speaking activities students in your course take part in? Consider both evaluated and informal activities. (e.g. speaking in small groups, delivering presentations, participating in informal conversations with instructors)
6. Upon entry into CST and/or CIT, what kind of English writing and speaking tasks should a student be able to do to succeed in your class?
7. What language tasks do you find to be especially challenging for your students? Are there any specific types of activities that cause problems for students?
8. Since I want to find out what level of English is required to be successful in courses in the first term of CIT or CST, how would you define being successful courses?
9. What expectations do you have of a student's language skills when he/she starts the first term of CST/CIT?
10. Can you describe your first-term students' general ability as language users in your courses?
11. What kinds of writing tasks are your students required to do?
12. What do you find is challenging for your less fluent students?
13. What do the less fluent students excel at?
14. What kinds of speaking tasks are your students required to do?
15. What do you find is challenging for your less fluent students?
16. What do the less fluent students excel at?
17. I'm going to show you two writing tasks and sample scripts from IELTS candidates. After you read through each one, I will ask you a few questions:
  - a) Would someone at this level of ability (upon entry into the program) likely be able to cope with the language tasks in your class? Why?
  - b) What features of the writing do you think would make him/her able/unable to cope?
  - c) Do you have any other comments on this script? Would you make any recommendations to this student?
18. I'm going to play two sample speaking performances from IELTS candidates for you. After listening each one I will ask you a few questions:
  - d) Would someone at this level of ability (upon entry into the program) likely be able to cope with the language tasks in your class? Why?
  - e) What features of the candidate's English do you think would make him/her able/unable to cope?
  - f) Do you have any other comments on this sample speaking test? Would you make any recommendations to this student?