The Task Force on Support for English Language Competency
Development at the University of Waterloo: Final Report

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Executive Summary

English language competency, simply put, is crucial for University of Waterloo students. It underpins every task that the university requires of them, providing the foundation they need for deep learning. Likewise, language and communication skills are vital in the workplace, whether for students on a co-op work term or for graduates pursuing their careers. Moreover, the university’s reputation for excellence rests largely on the performance of its students when they move onto careers or higher learning.

However, average scores on the English Language Proficiency Exam (ELPE) have dropped 10 points over the past 10 years. According to anecdotal evidence, many Waterloo faculty members believe that students who meet the ELPE admission requirements do not necessarily have the language skills required to be deep learners in their discipline. Analysis of work term performance co-op employer evaluations of engineering students indicates that employers have similar concerns about students’ workplace communication skills.

A task force was therefore struck in June 2011 to respond to these concerns. Over the course of fall 2011, the Task Force consulted with the academic units on campus involved in developing English language competency among Waterloo students, and it reviewed relevant indicators, pertinent research literature, and descriptions of supports provided at other institutions.

The process revealed that the university boasts many strong resources and programs to help students develop English language competency. At the same time, significant gaps were evident, as was the lack of a cohesive, university-wide approach.

The Task Force concluded that to set up all students for academic and lifelong success an effective approach to developing English language competency among all University of Waterloo undergraduates must address the distinct needs of both Native English Speaking (NES) students and Non-Native English Speaking (NNES) students, and the distinct needs of different types of NNES students. It must address all four components of language competency: speaking, writing, reading, and listening. It must be integrated with discipline-specific courses. Finally, it must encompass every year of study, reflecting the fact that language competency is continuously developed.

The report therefore proposes a vision of how language competency can be developed by all students within all programs to ensure that all students can reach their full potential for lifelong success.
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<tr>
<th>Stage</th>
<th>Strategy</th>
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<tr>
<td>Entry: Admission requirements and</td>
<td>Maintain the existing Ontario Grade 12 U English credit requirement; for NNES students, maintain minimum test scores for IELTS and TOEFL (iBT); provide a bridge program for NNES students who fail to meet this standard but have strong potential in their intended discipline</td>
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<td>processes</td>
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<td>First Year: Building a foundation</td>
<td>Establish a 0.5-credit course in each program that will develop a foundation for English language competency; offer NNES students the option of a mixed NES/NNES setting or NNES-only setting</td>
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<td>for university-level competency</td>
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<td>Second Year: Honing skills within</td>
<td>Establish at least one second-year course in each program that focuses on discipline-specific abilities and language competency</td>
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<td>Upper Years: Demonstrating mastery</td>
<td>Ensure students in all programs have the opportunity to practice their language skills in a range of activities that demonstrate their mastery of language and communication within their discipline</td>
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While the Task Force’s mandate did not include postgraduate studies, this vision is equally applicable to language competency development at the graduate level with the recognition of certain characteristics unique to graduate students.

This report does not offer a comprehensive set of recommendations — a process that will require further research and resources. However, it concludes that implementing the vision will require central leadership, an investment of resources, and the commitment and involvement of the many units on campus with skills and expertise in English language competency development. Above all, it calls on the university to make English language competency a core value at Waterloo: for the sake of student academic and lifelong success and for the sake of the institution’s reputation for excellence.
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<td>BASE</td>
<td>Bridge to Academic SuccEss</td>
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<td>English for Academic Success (Renison)</td>
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<td>ELAS</td>
<td>English Language for Academic Success (Math, Conestoga College)</td>
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<td>ELI</td>
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<td>ESL</td>
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1 Introduction

There is growing university-wide concern regarding the English language competency of Waterloo’s undergraduate students. This concern is based on various metrics such as declining trends on the English Language Proficiency Exam (ELPE) performance and on co-op employer dissatisfaction. The latter is particularly damaging to Waterloo’s reputation, given that co-op is a founding and defining feature of this institution.

Two changes over the last decade appear to have had an impact on the English language skills of the student body. First, Ontario has implemented significant changes in its high school curriculum. Due to diminished practise time at the high school level, it is reasonable to presume that there has been an overall decrease in the average students’ competency in the use of English language skills, especially in the academic setting. Second, the number of the Non-Native English Speaking (NNES) students in both co-op and regular programs at Waterloo has increased compared to the number of Native English Speaking (NES) students. This trend is expected to continue, since not only is it one of Waterloo’s Sixth Decade goals, it is also endorsed by the Government of Ontario.

A task force was therefore struck in June 2011 by Geoff McBoyle, Vice-President Academic & Provost, to respond to these concerns. The Task Force on Support for English Language Competency Development at the University of Waterloo included members with a breadth of expertise and perspectives:

- Sheila Ager, Classical Studies
- Serge D’Alessio, Office of the Dean, Mathematics
- Audrey Olson, Languages Institute, Mount Royal University
- Gordon Stubley, Mechanical and Mechatronics Engineering (Chair)
- Bud Walker, Student Services

The Task Force was requested to

- provide a brief overview of the University’s current English language support services, courses, and programs;
- characterize the English language skills of Waterloo’s students based on available admissions data, English Language Proficiency Exam (ELPE) scores, marks in selected larger “writing-intensive” courses, and interviews with students and with instructors in these courses and within the English Language Proficiency Program and the English Language Institute;
- characterize the nature and types of English language skill deficiencies;
- assess the current needs for English language support services and programs and characterize the university’s ability to meet this demand;
characterize existing good exemplars, if available, of broad English skill development programs at institutions similar to Waterloo in terms of program design, required resources, and measured effectiveness;

project future needs/demand (3–5 years out) based on trends and future enrolment projections; and

identify top priorities in need of further exploration.

Work began in September 2011. During fall 2011, the Task Force met with representatives from

- the English Language Proficiency Program,
- the English Language Institute (Renison University College),
- the PD2 (Critical Reflection and Report Writing) instructional team,
- the Department of English Language and Literature,
- the Faculty of Mathematics and Conestoga College’s English Language for Academic Success (Math/ELAS) program, and
- Co-operative Education and Career Services.

In addition, the Task Force reviewed relevant indicators of English language competency and attitudes, pertinent research literature, and descriptions of supports provided at other institutions. The findings were synthesized in winter and spring 2012 and presented in the current report.

The remainder of the report is structured as follows:

- Section 2 sets the context for the Task Force’s vision. It establishes the importance of English language competency in meeting Ontario’s Undergraduate Degree Level Expectations, in fulfilling the University of Waterloo’s commitment to excellence, and in contributing to the academic and lifelong success of the University’s students, regardless of mother tongue.

  It also describes the skills that contribute to English language competency and the ways they are applied within a university setting. Finally, this section contrasts the needs of different groups of Waterloo students based on their type of exposure to the English language.

- Section 3 lays out the Task Force’s vision for the development of English language competency at Waterloo. The proposed approach emphasizes continuous development over the course of each student’s education, with specific strategies outlined for admissions, first year, second year, and upper years.

- Section 4 presents a plan for achieving this vision. It describes the existing programs and stakeholders that contribute to the development of English language competency at Waterloo and then proposes how — with high-level leadership and an appropriate
investment of resources — these could be realigned within a new infrastructure to achieve the vision set out in Section 3.

- The report concludes with lists of references cited and further readings that shaped the Task Force’s approach.
2 Background

2.1 Institutional Educational Context

2.1.1 Ontario’s Undergraduate Degree Level Expectations

The University of Waterloo, like its sister institutions in Ontario, has adopted the six Undergraduate Degree Level Expectations (UDLEs) proposed by the Ontario Council of Academic Vice-Presidents (2007). The six UDLEs set out the skills and knowledge that graduates of baccalaureate and bachelors programs at Ontario’s publicly assisted universities are expected to achieve. In adopting this framework, Waterloo and other Ontario institutions recognize that English language competency directly influences students’ abilities to meet portions of the first four UDLEs, as cited below:

1. **Depth and Breadth of Knowledge**: a developed ability to i) gather, review, evaluate, and interpret information; and ii) compare the merits of alternative hypotheses or creative options, relevant to one of more of the major fields in a discipline.

2. **Knowledge of Methodologies**: ... an understanding of methods of enquiry or creative activity, or both, in their primary areas of study that enables the student to ... describe and comment upon particular aspects of current research or equivalent advanced scholarship.

3. **Application of Knowledge**: a) the ability to review, present, and critically evaluate qualitative and quantitative information ... c) the ability to make critical use of scholarly reviews and primary sources.

4. **Communication Skills**: ... the ability to communicate information, arguments, and analyses accurately and reliably, orally and in writing to a range of audiences.

While all Ontario institutions recognize the importance of English language competency, there are three features of the Waterloo context that demand particular attention be given to supporting the development of Waterloo students’ English language competency:

- the presence of co-operative and other forms of experiential education
- the size and nature of the student population for whom English is not a native language
- Waterloo’s push for excellence

Waterloo distinguishes itself from other Ontario (and Canadian) institutions by the extent and breadth of its co-operative education programs in all six faculties. Approximately 60 per cent of Waterloo undergraduate students are enrolled in the university’s 120 co-op degree programs. Waterloo is also committed to offering a mix of experiential learning opportunities to all
students, including those in regular degree programs. This commitment is evident in Waterloo’s adoption of an additional UDLE specific to experiential learning:

7. Experiential Learning: articulate their learning from experiential or applied opportunities. (University of Waterloo, “Degree-level expectations”)

By specifying that students must be able to articulate their learning, this UDLE implies that they must have the competency to describe the complex growth associated with experiential opportunities. Such competency is also crucial to the effectiveness of experiential learning opportunities in other ways, directly influencing the ability of students to obtain jobs in a competitive interview and selection process, to learn necessary professional and workplace skills in a relatively unstructured learning environment, and to communicate findings, results, and concerns to colleagues and supervisors.

2.1.2 Waterloo’s Student Populations
For quite some time Waterloo has attracted top academic students to its undergraduate programs. According to the University of Waterloo website (“Waterloo facts”), the present average of entering undergraduate students is 87.2% — a clear indication of the academic quality of Waterloo students. However, as mentioned in the previous section, over the past decade there have been two significant changes to the background of these entering students that impact their language competency: changes to the Ontario high school curriculum and increasing numbers of NNES students. One obvious consequence of the change of the high school curriculum from five years to four years is that the time available for students to develop and practise language competency, especially at the senior high school level, has been reduced.

Also, the proportion of NNES students in both co-op and regular programs at Waterloo has increased compared to the numbers of NES students over the past decade. These NNES students are most commonly

- permanent residents in Canada or Canadian citizens who do not speak English as their first language, or
- international visa students.

These numbers are expected to rise in the coming years for two reasons. One is the Sixth Decade Plan, in which Waterloo has stated its commitment to increasing the numbers of international visa students at the university. As evidence of this, there appears to be an increasing number of degree program forms, such as 2+2 programs, that will further increase the size and diversity of the NNES student population. The other factor is present Canadian population demographics, which show an increase in permanent residents and Canadian citizens who were born outside the country (Citizenship and Immigration Canada, 2011).
Both NNES and NES students need to develop competency to ensure academic success in both the classroom and experiential learning environments and to meet the UDLEs. However, the attributes and needs of these two student populations differ, as do the needs and attributes of different segments of the NNES student population. For example, NNES students coming to the Waterloo campus in the third year of a 2+2 program will have different competencies compared to students who have spent their first two years on campus. For a more detailed discussion of these needs and attributes, see Section 2.4.

### 2.1.3 Waterloo’s Commitment to Excellence

In both its Sixth Decade Plan and the present Mid-Cycle Review, Waterloo has committed to developing the excellence that will lead to its global recognition as a top-tier university. Waterloo’s students are a clear vehicle for widely demonstrating the excellence of a Waterloo education through their abilities and accomplishments. It is noteworthy that many current top-tier universities, including Harvard, Stanford, and the University of Toronto, explicitly recognize the importance of English language competency in establishing their students’ success and have made the development of this competency in their student body a top priority. In its drive for excellence, Waterloo will need to ensure that its students are well placed to demonstrate the excellence of their abilities and accomplishments and to speak to the excellence of the education they received.

### 2.2 Forms of English Academic and Workplace Communication

#### 2.2.1 Skills

As with any language, thorough competency in English requires mastery of a set of four distinct but interrelated skills: reading, writing, listening, and speaking. These skills fall into two categories: the “productive” forms of language (speaking and writing) and the “receptive” forms (reading and listening).

The productive forms require language-users to *formulate* comprehensible expressions. The receptive forms, on the other hand, require the user to *comprehend* the expressions of others, whether presented orally or in writing. These skills develop at varying rates and to varying degrees in each person. That is, even an adult native English speaker may be more adept at speaking than writing or at listening than reading, for example. Each skill also has particular sub-skills and constraints. For example, writing an academic essay — a productive skill — requires knowledge of and precision with grammar and spelling. In contrast, the task of reading — a receptive activity — does not generally require the same spelling knowledge or absolute precision of grammar. Even an oral academic presentation, while still involving productive skills, does not demand the precise formal grammar structures of an academic essay. Competency in
one form does not guarantee competency in the others, and the challenges inherent in mastering such competencies vary from one form to the next.

University course assessments tend to emphasize the demonstration of productive language skills over receptive ones. Students are thus apt to focus on the development of productive skills, especially writing skills. It is clear, however, that the ability to read and comprehend written English and the ability to understand spoken English are vital to a student’s academic success. Currently, this need is not adequately addressed in the university context, where the opportunities for developing receptive skills are very uneven.

University pedagogy starts with the general expectation that students should be able to understand and process orally delivered lectures; there is little opportunity for students to find assistance in improving this skill. This can present a challenge for NNES students in particular, and there are anecdotal accounts of some students resorting to taping lectures and listening to them repeatedly in order to understand them. The need to do so has obvious implications for students’ time management and stress levels, not to mention their ability to engage in deep learning.

2.2.2 Genres
In addition to distinguishing between the different forms of language and their requisite skills, a distinction needs to be made between different genres of communication within a given language. Academic, professional, personal, social, formal versus informal: these are all differing modes of communication, and the same individual will not necessarily have the same facility with all the modes. We would not expect individuals with no academic training to excel in the use of academic English, for example, even if they were native English speakers. Similarly, NNES students with extensive academic training in an English system might be comfortable with the vocabulary and syntax of academic English (or, more precisely, the vocabulary of their own discipline) but at the same time struggle to function in ordinary social conversation.

In the university setting, both productive and receptive English language skills focus on academic communication. For receptive skills, this takes the form of absorbing information from lectures, textbooks, and other readings. For productive skills, the most common forms are writing assignments, essays, reports, exams, and theses, and delivering seminars and oral papers. The forms of academic communication tend to be discipline-specific: critical analysis in a humanities subject is likely to be pursued through an essay-type assignment, while in the natural sciences such analysis could take the form of a laboratory report. Nevertheless, the requirement for language competency is crucial across all disciplines.

While academic genres dominate in the context of the university, they are not the only genres of communication. The important role played by co-operative education at the University of
Waterloo means that its students are regularly exposed to workplace and professional genres, such as resumés, business letters, reports, professional assessments, memoranda, e-mail, and various other types of workplace communication. Students are thus required to develop skills and display competency in these non-academic modes of communication as well.

Finally, Waterloo students encounter public communication genres on a daily basis, such as media (television, newspapers, internet), social communication, public speaking and debating. All of these are genres of communication require both productive and receptive skills.

### 2.3 A Core Skill for Academic and Lifelong Success

Since the University of Waterloo is an English-language institution, its various modes of pedagogical delivery and assessment require that students have sufficient competency in the English language to comprehend and to perform to high standards. English language competency underpins every task that the university requires of its students, whether it is a relatively simple matter of being able to follow instructions on a test or in a lab, or the more complex, intense, and sustained work involved in the production of a graduate thesis. Likewise, language and communication skills are vital in the workplace, whether for students on a co-op work term or for graduates pursuing their careers. Lifelong learning, which requires the ability to independently comprehend and communicate, is key to career enhancement and personal fulfillment. The view of this Task Force is that the university is well positioned to ensure that its students are provided with the core language skills necessary to succeed in all aspects of their lives.

#### 2.3.1 Learning

The university aspires to have its students achieve a profound level of knowledge and understanding that will enable them to build on a sound foundation, integrate new knowledge as they encounter and acquire it, and engage in abstract and critical reasoning. The Undergraduate Degree Level Expectations (see Section 2.1.1) speak precisely to these goals.

The University of Waterloo has recently demonstrated its commitment to effective teaching and deep learning through such initiatives as the Task Force on Innovative Teaching Practices to Promote Deep Learning (Ellis et al., 2011). According to the deep learning task force, “deep learning is taken primarily to involve students retaining knowledge and, through making connections, applying that knowledge appropriately in new and different contexts.” The goals they identified emphasize depth of understanding and the ability to apply what has been learned in the past to new situations, in contradistinction to short-term memorization for the purpose of passing a particular test or course.
It goes without saying that the move beyond shallow learning to deep learning requires students to have a high level of competency in English. Rote memorization may (or may not) be achieved without full comprehension of a subject or the language of expression, but the kind of profound understanding and integrative reasoning that Waterloo hopes to instil in its students cannot be achieved without teaching and learning methodologies grounded in the various forms of English language communication.

2.3.2 Academic Assessment

Academic assessment of students relies virtually completely on their capacity for clear and correct communication. While it is true that some disciplines may rely more heavily on a mathematical or scientific language than on English, there is no program at the University of Waterloo that does not require its students to be able to communicate effectively in English.

It is in assessment that students’ productive skills, both written and oral, are most on display. Receptive skills are clearly of greatest importance in a classroom setting, as well as in many areas of independent learning outside the classroom (reading, online research, or any other assignment that requires a student to absorb information). However, very few metrics are applied to assessing a student’s skill in this area in the normal course of university functioning. The chief exception to this rule — and it is an important one — is in larger, lower-year classes, where testing is often limited to objective-style midterms and exams. In this scenario, a student’s ability to first grasp information and then to read and comprehend test questions is vital. However, assessment practices for such types of courses don’t distinguish between ignorance of the facts and failure to comprehend the question.

Standard pedagogical methodologies, at least at more senior levels, feature summative assessments of written or oral work such as papers, assignments, seminars, reports, and theses. Ideally, such regular summative assessments of writing and/or speaking also play a formative role: feedback on essays and assignments, for example, may guide a student in developing writing skills. There is a considerable gap between the ideal and reality on this point: many professors do not feel they have the time or capacity to comment on matters of English writing skills; many professors do not believe it is their responsibility to do so; and many students do not read, understand, or accept what comments might be made. It is also clear that opportunities to practise writing and speaking skills vary considerably between programs and faculties.

It should be clear that while assessment activities often rely heavily upon productive skills and that acquisition-of-knowledge activities rely heavily upon receptive skills, there is not a hard

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1 Summative assessments are used to measure the degree of learning at a particular time and can be contrasted with formative assessments that are used to guide the learning process.
and fast separation of these skills between acquisition and assessment. A major exception — objective testing — has already been noted. Various other types of student work could also cross these boundaries: informal classroom discussion, for example. Likewise, a research essay that requires writing skills to produce also requires reading skills to research in the first place. The purpose of this section is not therefore to formulate any kind of rigid matrix, but rather to identify the range and significance of the various language skills in a student’s academic life.

2.3.3 Lifelong Skills

This report has already noted the importance of English language communication skills in a wide variety of genres, academic and otherwise. The university has recently moved in the direction of defining “student success” more broadly, viewing its role as one of preparing students for career and life success in addition to academic achievement. This expanded role grows logically out of the university’s natural responsibility to prepare students academically and is further enhanced by Waterloo’s particular mix of academic and experiential learning. Students who attend Waterloo can and should expect assistance in acquiring skills valuable in job placement, the workplace environment, peer communication, career and personal development, and lifelong learning. The university aims to graduate individuals who will be well-rounded and informed citizens. The ability to function in the English language — to read reflectively, listen critically, write analytically, and speak persuasively — is key to all these goals.

2.4 Native English Speaking and Non-Native English Speaking Students

2.4.1 Shared Attributes of NES and NNES Students

NES and NNES students at Waterloo share a number of attributes related to language development:

- expectations based on the National Survey of Student Engagement and other indicators
- skill in new language genres (discipline-specific and genres external to the classroom)
- developing maturity and sophistication of language use
- core skill built by practice, reflection, and exposure to expanding levels of complexity

Moreover, a number of variables affect the skill development in all students:

- individual motivation and interest
- context (both inside and outside a classroom)
- classroom methodologies
- curricula
- the type and frequency of exposure to language
• the type and frequency of language practice

2.4.2 Unique Needs of NNES Students
NNES students also demonstrate unique skills and abilities with language, which may also determine their specific needs for language support. Understanding these needs begins with understanding the diverse nature of this student body. NNES students at the University of Waterloo include the following groups:

• foreign-born citizens or permanent residents educated in the provincial school systems in Canada
• international students educated in academic cultures similar to Canada’s who are undertaking their entire degree at Waterloo
• international students educated in academic cultures quite dissimilar to Canada’s who are undertaking their entire degree at Waterloo
• international students completing part of their Waterloo education in their own country and then completing their degree in Canada

NNES students therefore demonstrate a variety of needs and abilities, depending on their language and cultural experience prior to arrival on campus. As one example, many students who immigrated to Canada as children or adolescents are exposed to a high degree of oral language through media and peers. As a result, they speak fluent, idiomatic English, with little accent and have little difficulty with listening and comprehending. However, those skills do not translate directly into reading and writing abilities, and there can be distinct weaknesses and gaps that affect academic progress. In contrast, a foreign-taught NNES may have completed a great deal of book-based study of language and have the ability to read text, have an extensive knowledge of academic vocabulary and even be able to produce accurate, if formulaic, written text but have had little awareness or exposure to the sound of the language and not be able to speak it fluently or understand it when others speak.

This highlights a key point: while vocabulary acquired through reading can be used in speaking or writing, and while listening to others provides valuable information that can be applied to speaking, strengths or weaknesses in any one skill do not guarantee nor indicate relative strength or weakness in the others.

That said, NNES students generally demonstrate weaker academic writing skills than their NES peers in three key areas: less breadth and accuracy of vocabulary, lack of accuracy and complexity in the use of grammatical structures, and weakness in differentiating appropriate register and structural components in written work. As a result, their work appears to be less complex or effective in the eyes of an NES reader (Hinkel, 2003, 2011; Silva, 1993).

In addition to variations in skill development, NNES students demonstrate variations in the ability to negotiate culturally determined language contexts, each with its own vocabulary,
degree of formality, and forms and standards. For example, culture determines the way that we interact with peers as opposed to superiors, in writing as opposed to speaking, in academic writing as opposed to business writing, or in friendly email or text messages as opposed to academic or business-related email. As with skill development, one cannot assume that facility with language use in one culturally determined context translates into ability in another context. To complicate the issue, many NNES students are streamed — by choice or otherwise — into interacting with peers with the same language or culture. Thus, they may not gain as much exposure to the Canadian context, reducing their likely degree of success both in the classroom and in the workplace.

While all Waterloo NNES students are required to meet language entrance standards that indicate their general facility with English, and while those Waterloo standards are as rigorous as the standards at equivalent institutions, language development does not stop with an offer of admission. Rather, it should be assumed that students will develop their language skills and their ability to use language in specific cultural contexts throughout the course of their university education.

In his report to the Ministry of Education of New Zealand based on a comprehensive review of research, Ellis (2005) identifies principles that constitute effective pedagogy for the acquisition of a second language in a classroom context (p. 1):

- NES students use more formulaic expressions than NNES students, and even advanced second-language learners will need instruction in appropriate formulaic expressions, as well as some ongoing focus on language rules.
- Instructors should focus on form of language, through direct instruction and also through corrective feedback in context.
- Learners require extensive exposure to and practice of the language they are acquiring. According to Ellis, “the more exposure they receive, the more and faster they will learn” (p. 38). This refers to exposure to both oral and written language, inside and outside the classroom.
- Socio-cultural interactions and the consequent negotiation of meaning that occurs in interactions are essential for developing proficiency.

These principles provide guidance in determining best practices for NNES students as they continue to develop both language and content knowledge in their time at Waterloo. Throughout its deliberations the Task Force has considered how this growing group of students can best be assisted in developing the academic, personal, and workplace communication skills expected of a successful Waterloo student.
2.4.3 Integrated Versus Streamed Approaches

Approaches to language instruction vary. There are teaching models that stream students into NES and NNES sections and models that mix NES and NNES students in sections. The research literature on the effectiveness of streaming is not conclusive. The recent study by Smollett, Arakawa and Keefer (2012) on academic performance of NNES students at OCAD University indicates that sheltering (streaming) NNES may be beneficial. There is also literature, such as Matsuda (1999), that indicates that an integrated approach to English language competency whereby NES and NNES students are taught together instead of being separated is more effective. This latter approach can be resource intensive, as it may require English as a second language (ESL) instructors working closely with faculty members on individual courses as well as preparing supplemental online material.

2.5 Specifics for Graduate Education

While the primary focus of the Task Force was on the undergraduate education experience, many of the observations outlined above also apply to graduate education at Waterloo. That said, there are several differences between the roles and impacts of English language competencies at the graduate and undergraduate levels that are worth noting.

Several attributes of the incoming graduate student population are noticeably different from those of the incoming undergraduate student population. One obvious difference is the increased percentage of international students: according to the University of Waterloo website (“Who we are”), international students represent 30 per cent of the graduate student population, compared to 10 per cent of the undergraduate student population. A second difference is increased average age. With this increased age comes a more developed sense of career path and, with that, a strong personal motivation to achieve both academic success and long-term professional success. While the increased fraction of international students in the incoming graduate student population translates into a larger fraction of NNES students, their strong motivation to succeed means that they are more likely to overcome their initial lack of English language competency. Thus, this initial weakness is less likely to prove a long-term impediment. The established academic strengths of these students also augur well for their success: most Waterloo graduate students were generally in the top 25 per cent (or higher) of their graduating undergraduate classes.

Like undergraduates, graduate students are exposed to a range of academic genres that depend, at least to a certain extent, upon the academic discipline. However, three genres almost universally dominate in all disciplines at the graduate level: the thesis, academic journal papers, and conference presentations. Competency in these genres is a necessary prerequisite
for both success in graduate studies and long-term success in the academic career that is a goal for many graduate students.

As discussed earlier, the university has a vested interest in ensuring that its students graduate with exemplary communication skills, as this helps to establish the reputation of the institution and its graduates. In the case of graduate students, there is a further benefit. Because graduate students are extensively used as teaching assistants for undergraduate course teaching teams, ensuring they have strong language competency produces teaching assistants who are able to be both effective communicators in the classroom and ideal role models for exemplary language competency skills.
3  A Vision for Continuous Development of Language Competency

What would the development of English language competency at Waterloo look like in five to ten years in order for both the institution and its students to achieve their full potential? In this section, a vision of how language competency can be developed by students within all programs is outlined. This vision is broken down into four components:

1. The Entry: Admission Requirements and Processes
2. The First Year: Building a Foundation for University-Level Competency
3. The Second Year: Honing the Skill within the Discipline
4. The Upper Years: Demonstrating Mastery

The development of this vision has been guided by three principles:

1. Strong English language competency is a significant contributing factor to a student’s ability to achieve deep learning and overall academic success.
2. Strong English language competency is necessary for students to achieve and demonstrate the UDLEs for all Waterloo degree programs.
3. English language competency is a core cognitive skill that is developed through continual practice with informed feedback and guidance.

Ultimately, this proposed vision is intended to ensure that all students who graduate from the University of Waterloo, regardless of program, meet the UDLEs associated with communication and are recognized in the workplace and wider community as able communicators and advocates for their disciplines.

3.1  The Entry: Admission Requirements and Processes
Students’ first engagement with Waterloo’s academic programs typically occurs at the admissions stage. First and foremost, the admission requirements for English language competency are intended to ensure that students have the necessary language skills to benefit from studies at the first-year level. The admission requirements also help shape students’ attitudes towards language competency. Setting and enforcing high admission standards sends a message that the development of language competency is a key component of any Waterloo degree program. However, this same implicit message has the potential to deter many applicants who have the potential to thrive in a Waterloo program but may not meet the English Language Proficiency (ELP) requirement. Representatives from the various faculties meet on an annual basis to review, and adjust as necessary, the institutional admission
requirements for English language competency to ensure the appropriate balance between maintaining admission standards and not deterring students who have the potential to thrive.

The current University of Waterloo admission requirements are as follows:

- for all students, a credit in Ontario Grade 12 U English or equivalent with minimum final grade of 70 per cent, and
- for NNES students, additional evidence that:
  - their four most recent years of schooling instruction have been in English, or
  - they have achieved language proficiency as measured by standard test scores from approved tests including, but not limited to, TOEFL (iBT) and IELTS, or
  - they have completed the advanced (400) level of the English for Academic Success program, at Renison University College, with an overall average of at least 80 per cent

(Note that individual programs may set higher admission requirements as appropriate.)

Table 1 shows the current minimum required test scores for the IELTS and TOEFL (iBT) tests for Waterloo, along with current minimum required test scores at several other Canadian universities with strong overall reputations. Generally speaking, the Waterloo requirements are equal to or stricter than those shown for other leading Canadian universities.

<table>
<thead>
<tr>
<th>Institution</th>
<th>IELTS</th>
<th>TOEFL (iBT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall</td>
<td>Writing</td>
</tr>
<tr>
<td>University of Waterloo</td>
<td>7.0</td>
<td>90</td>
</tr>
<tr>
<td>University of British Columbia</td>
<td>6.5</td>
<td>90</td>
</tr>
<tr>
<td>University of Toronto</td>
<td>6.5</td>
<td>100</td>
</tr>
<tr>
<td>McGill University</td>
<td>6.5</td>
<td>90</td>
</tr>
</tbody>
</table>

Given these relatively strict admission requirements for NNES students, it is highly possible that potential students may have excellent foundational knowledge in a particular discipline but not be able to enter studies in that discipline at Waterloo solely because they fail to meet English language skill requirements. For these students the Task Force envisions that Waterloo will provide a bridge program. This approach — similar to the existing Math/ELAS program described in Section 4.1.2 — would identify otherwise highly qualified NNES students applying
to programs and offer them conditional admission based upon strong performance in one bridging term of study with an adjusted course load. This course load would consist of

- one first-year course from their chosen program or discipline,
- two course equivalents on English language skills, and
- one course on skills necessary for academic success in a Canadian university.

Such a graduated entry would enable students to acquire appropriate academic and language skills while at the same time experiencing a supported integration into the Waterloo and Canadian culture. Providing this graduated entry would clearly demonstrate Waterloo’s commitment to developing student success.

### 3.1.1 The First Year: Building a Foundation for University-Level Competency

According to anecdotal evidence, many Waterloo faculty members believe that students who meet the admission requirements outlined above do not necessarily have the requisite language skills to be deep learners in their discipline. Parker, Fondacaro and Nespoli’s 2011 analysis of the co-op employer evaluations of Waterloo engineering students — a group where NES students form the majority — shows that the workplace skill most identified as needing improvement after the first work term was communication (written and oral presentations). In other words, employers believe that engineering students from Waterloo need to develop their English language skills. This particular analysis was restricted to the Faculty of Engineering. However, since the average ELPE scores of entering engineering students are consistently equal to or greater than the average ELPE scores of all entering students, this conclusion likely applies to students in most programs.

Moreover, the analysis of the co-op employer evaluations for engineering students shows that even after the fifth work term, the skill most identified as needing improvement remains communication. While it is reasonable to assume that employer expectations for senior students will be greater than for junior students, it seems clear that employers perceive Waterloo engineering students as having inadequate communication skills for career success, even at this advanced stage in their education. Thus, employers judge that Waterloo engineering students are not meeting UDLE 4: Communication skills. Corresponding data for students in other Waterloo programs is difficult to obtain. However, given the moderate emphasis on communication in engineering programs, it is reasonable to assume that this conclusion applies to students in many, if not all, Waterloo programs.
To ensure that Waterloo students have the necessary language skills for academic success and have the basis for developing language skills to meet the UDLEs, the Task Force envisions that each program will have a required 0.5-credit course that will develop a foundation for English language competency in the first year of study. Some programs may allow students to choose from a select group of centrally provided courses to meet this requirement, while others may develop very specific program courses to meet the requirement. While it is expected that there will be a range of foundation courses available to meet this requirement, all of them should have the following attributes:

- Both productive (writing and speaking) and receptive (reading and listening) modes of communication should be developed and practised.
- The expected outcomes should focus on those appropriate for academic study. By the end of the foundation course, students are expected to have sufficient language competency to:
  - write in academic genres such as essays, short descriptions or arguments, reports, and other types of documentation appropriate to their discipline;
  - read academic text in textbooks, books, journals, and other archival media; and
  - listen and speak in academic settings, including lectures, forms of peer-to-peer communication, and student presentations.
- While it is expected that students must meet minimum expected outcomes to achieve credit, the learning model employed in the teaching strategy should be a developmental one in which students are expected to practise and improve upon their own incoming skills.
- To promote student engagement, exercises should be relevant to their chosen discipline and allow students some element of choice to tailor the exercises to their individual needs.

It is beyond the scope and expertise of the present study to design a typical foundation course. The Task Force envisions that a variety of courses would be developed within the Department of English Language and Literature, the English Language Institute at Renison, and the individual faculties (the latter to provide a strong discipline perspective). The fourth section of this report discusses in more detail the resources required to achieve this. At this point, however, it should be emphasized that the instructional and subject expertise in the Department of English Language and Literature, the English Language Institute, and the faculties is complementary and that course design should draw upon expertise from a range of units.

As discussed in Section 2.4.2, approaches to language instruction vary and the research literature on the effectiveness of streaming or non-streaming based on incoming skill level or mother tongue is not conclusive. Given the number of faculties and programs, the Task Force
envisions that that there will be sufficient foundation courses to offer students a range of teaching models. It is particularly important that individual NNES students have the option of building up their foundation skills in either a mixed NES/NNES setting or a setting focused on the needs of NNES students alone.

### 3.2 The Second Year: Honing the Skill within the Discipline

While successfully completing the proposed English language competency foundation courses should ensure that all students have the opportunity to develop the levels of competency required for success in their academic programs, it does not ensure that they will have sufficient competency to meet the UDLEs as they approach graduation. In particular, further language development is required to ensure that students

- achieve the levels of deep learning within their subject disciplines implied in the first three UDLEs (knowledge, methodology, and applications), and
- develop the skills to communicate their disciplinary knowledge and findings to a wide range of audiences, as required by the fourth UDLE.

It is noteworthy that both goals require tightly integrating the development of language competency with the development of discipline knowledge and skills. Therefore, the Task Force envisions that each program will have at least one second-year course with learning outcomes that include both discipline-specific abilities and language competency.

This strategy of combining the improvement of language competency with the development of discipline ability — often called “writing across the curriculum” — is based on the premise that through iterative writing, reading, speaking, and listening exercises, students develop a clearer and deeper understanding of their discipline knowledge (Bean, 2001). This approach necessarily entails reducing discipline-specific content in order to incorporate language competency development — a proposition that many instructors may greet with concern. However, it is crucial that instructors recognize this approach results in clearer and deeper learning, and thus it can actually increase long-term student understanding of their discipline-specific course content. In other words, sometimes “less is more.” A wide variety of strategies are available to instructors to integrate English language improvement and standards within their already-defined course curriculum. Assistance with such strategies is also widely available through a number of initiatives and support units focused on improving teaching at the university (see Section 4.1.2).

The Task Force recognizes that making this strategy a degree requirement for all programs may be difficult. For relatively structured programs, such as those in engineering, it should be
straightforward to specify first- and second-year courses that establish foundational competency and then hone that competency within the discipline. In programs where students do not need to select their majors until well into third year, it becomes more problematic to specify these degree requirements. However, the Task Force believes that it is reasonable to expect all students to take a foundation language competency development course in their first year and then to take a course in their second year designed to hone those skills within a subject area that will be relevant to their ultimate choice of a major or a specific discipline.

3.3 The Upper Years: Demonstrating Mastery

Once the foundation competency is established and honed, the Task Force envisions that students in all programs will have the opportunity to practise their language skills in a range of activities that demonstrate their mastery of language and communication within their chosen disciplines. Since the vast majority of students will already be undertaking activities such as report and essay writing and class presentations in their upper years, this should not require significant changes to implement.

There are, however, several aspects of the proposed vision that will require attention to ensure that intended degree outcomes are met:

- The expectation is that all students in all programs must demonstrate mastery of language before graduation by completing major activities within their programs. In other words, demonstrating English language competency must be a degree requirement.
- It is crucial that the expectations for demonstrating mastery be consistent with the students’ foundational preparation from their first and second years.

3.4 Postgraduate Studies

The focus of the Task Force has been on undergraduate studies, although the development of language competency is no less important for graduate students. However, given the high degree of independent study, both within and outside courses, that characterizes graduate studies, it is difficult for the Task Force to make meaningful specific proposals for the graduate programs.

What can be said is that the principles articulated in the proposed vision for undergraduate programs are equally applicable to the development of language competency at the graduate level, with the recognition that the degree of independence requires that the implementation of these principles be program-specific. Furthermore, there are several important differences
between graduate and undergraduate studies that should be considered. Specifically, language competency development for graduate students should account for the following facts:

- With international students representing 30 per cent of the graduate student population, pathway programs are particularly important for admission to graduate programs.
- International graduate students are typically highly motivated to develop English language competency, as this competency is viewed as necessary for career success in many international contexts.
- Several specific academic activities at this level, such as preparing and defending theses, rely heavily upon both written and spoken competencies.
- Graduate students often act as teaching assistants (TAs) and graders for undergraduate courses. For any undergraduate courses that explicitly develop language competency, all members of the teaching teams, including graduate student TAs and graders, should be role models for exemplary communication skills.
4 A Plan for Achieving the Vision

4.1 Existing Resources for English Language Competency Development

English language competency at Waterloo is presently promoted explicitly in the English Language Proficiency (ELP) requirement and implicitly in many program curricula through coursework and additional degree requirements. These are described below.

4.1.1 The English Language Proficiency Requirement

In order to obtain their degree, all Waterloo undergraduate students, regardless of program, are currently required to pass the English Language Proficiency Exam (ELPE) or to meet an alternate requirement if they fail the exam. In the ELPE, students are given one hour to write an impromptu essay of 300–500 words on one of three specified topics. Students are allowed to ask for clarification on the wording in the specified topics so that student vocabulary or knowledge of idioms is not a limiting factor. The exam is marked on essay organization, application of language, and use of common knowledge. Students generally attempt the exam in first year or prior to starting their first-year classes.

Depending upon faculty and program, the pass requirement for the ELPE is either 60 or 65 out of 90. Figure 1 (below) shows the overall pass rate of students attempting the ELPE from the 2003–04 academic year to the present. In the 2010–2011 academic year, the faculty pass rates of students writing the ELPE for the first time varied between 60 and 85 per cent. The pass rates are generally higher in faculties where students write the ELPE later in the academic year than in those where students write the ELPE early on. It is clear that the pass rate has dropped significantly over the last ten years. It is noteworthy that if the pass requirement was set to 70 (the minimum Ontario High School Grade 12 English grade required for admission) then the 2011-2012 pass rate would drop from 62% to 26%. While there is no firm data comparing the pass rates for NES and NNES students, anecdotal evidence suggests that NNES students make up three quarters of those failing the exam.
When students fail the ELPE, there are a variety of paths they can follow to meet the ELP degree requirement. These include:

- **Re-write the ELPE**: Students can re-write the ELPE after their first attempt. Students are encouraged to meet with a tutor in the Writing Centre to review their ELPE and receive guidance on improving their writing prior to re-taking the exam. Students in engineering and software engineering are restricted to two attempts at the ELPE.

- **Attend an ELPE Review**: Students with scores within two to three marks of passing are given a passing grade if they schedule and attend a 25-minute session with a tutor in the Writing Centre.

- **Take ELPE Tutorials (formerly the Writing Clinic Program)**: Students with scores within five marks of passing can take the ELPE Tutorial Program. There are two versions of this: a nine-week program (in class or online) and three-week program (in class only). For the nine-week program, students attend weekly two-hour writing sessions in the Writing Centre and achieve a pass when they have successfully completed the program (three writing assignments plus the in-class final exam). There is capacity for 80 students per term, and there is always a waiting list. Students who are on the waiting list for the nine-week program can opt for the three-week program. This consists of three consecutive sessions of writing lectures scheduled at the end of each term; there is capacity for 300 students per term. Students then write the ELPE at the next scheduled exam. Students are limited to one term in the ELPE Tutorial Program.

- **Pass Approved Credit Courses**: Students who fail the ELPE may satisfy the ELP degree requirement by successfully passing an approved English writing course. Students in different faculties and programs have slightly different lists of approved courses to
choose from, and the required grades in these courses may vary between 60 and 65 (out of 100) depending upon the student’s faculty. Some of these courses, such as ARTS 101, are restricted to faculty-specific students who have failed the ELPE; some courses, such as ESL 129R, are restricted to NNES students but can be taken by students who have passed the ELPE; and some courses, such as ENGL 210E, are open to all students.

Depending upon faculty and program, students are expected to have met the ELPE requirement before the end of their 1A, 2A or 2B academic terms.

The Task Force, with input from Ann Barrett (Writing Centre) and Jay Dolmage (English Language and Literature), makes the following observations about the ELPE in the context of the proposed vision:

- The ELPE attempts to measure writing competency. It does not address the other three competencies that are necessary for effective learning and communication: reading, listening, and speaking.
- Students are expected to write a five-paragraph (“sandwich”) thesis-driven academic essay that models the argumentative answers expected in many university submissions. Focussing on this particular genre limits the exam’s applicability for several reasons:
  - Many of the suggested topics, such as “What roles have your parents or guardians played in your education?”, are more suited to a narrative genre.
  - The academic essay is only one of many genres students will be expected to use in their particular programs or disciplines.
  - Students cannot provide external sources or references in their argument; this makes the resulting essay a very limited model for the argumentative submissions expected at the university level.
- There is no well-established connection between performance on the ELPE and overall academic success. A Faculty of Mathematics faculty study (D’Alessio, 2012) shows that math students who have successfully completed the English Language for Academic Success (ELAS) program described in Section 4.1.2 have higher graduation rates than math students who were not in the ELAS stream. However, successful Math/ELAS students have an ELPE pass rate below 25 per cent, a figure well below the average pass rate for math students as a whole. A study of retention of first-year engineering students showed that there is limited correlation between students’ ELPE scores and either their 1A term averages or 1B term averages. Given the strong evidence that English language competency is a significant factor in student retention and success (Bean, 2001), these findings imply that the ELPE is not an effective measure of overall competency, at least for students in the math and engineering faculties.
• There is significant literature (Byrd & Nelson, 1995) to suggest that NNES students are disadvantaged in ELPE-type exams since they may not be familiar with the expected essay format, the question prompts may relate to unknown cultural content, and the minor errors of form within their writing may detract inordinately from the content.

• Out of the many paths that students failing their initial writing of the ELPE can take to satisfy the degree requirement, some do little to improve their development of language competency. These paths include simply rewriting the exam and attending an ELPE review.

• Students, quite justifiably, see the ELPE as a barrier that must be overcome. It is not seen as an engaging activity intended to help them develop language competency.

In summary, while the English Language Proficiency requirement and ELPE itself may have provided a significant impact in the 1970–80s, they are currently not well aligned with either the competencies required for academic success in existing Waterloo programs or the proposed vision for developing language competency across the university. As the vision outlined in the previous section is developed, the Task Force expects that the ELP requirement will be discontinued.

### 4.1.2 Other Mechanisms for Developing English Language Competency

While the Task Force did not conduct an exhaustive study or survey, a scan of the program requirements across the university indicates that there are many mechanisms that have the potential to help students develop language competency.

**Core Courses Emphasizing Competency Development:** Some programs have core courses that focus largely on the development of language competency. Examples include SPCOM 111 (Leadership, Communication, and Collaboration) for students in the Accounting and Financial Management program and ENGL 210F, Genres of Business Communication, for students in the Arts and Business programs. Few programs have required core courses with a large focus on competency development and, as can be seen in the two examples, the emphasis of existing courses does not precisely match that of the envisioned foundation core courses, which would aim to focus on development of a breadth of language competencies crucial for academic success.

**Core Courses with a Significant Competency Development Component:** Some programs have first-year core courses that include materials and activities that explicitly provide opportunities for students to develop language competency in the context of the program discipline. Many engineering programs, including the chemical, civil, environmental, geological, management, mechanical, and mechatronics engineering programs, have a 0.75 credit core course in 1A with explicit components on written and graphical communications. The mechanical engineering version also includes a component on oral communication. It was beyond the resources of the
Task Force to examine the content of such courses and compare them to the envisioned foundation courses or to determine the extent of such courses throughout all programs.

**Elective Courses:** Most programs provide students with some degree of free choice in courses within the program. Depending upon the program requirements, students may elect to take courses like ENGL 109 (Introduction to Academic Writing) or SPCOM 223 (Public Speaking) to improve their language competency. ENGL 109 typically attracts more than 300 students a term, while SPCOM 223 had enrolments of 268 students in winter 2012 and 578 in fall 2011.

**Activities in the Curriculum:** Many courses include activities with the potential to develop language skills, particularly written skills. These activities include writing lab reports, writing essays, and making class presentations. There is anecdotal evidence to suggest that as student enrolment has increased over the past two decades, the number and extent of these activities have decreased. Similarly, the amount of feedback possible, whether formative or summative, has also dropped. While it is difficult to track these changes over time, the National Survey of Student Engagement (NSSE) surveys from 2008 and 2011 give a measure of student perception of these activities at Waterloo compared to similar institutions in Ontario and elsewhere.

Table 2: NSSE 2011 and 2008 responses to Questions 3 c, d, and e: “During the current school year, about how much reading and writing have you done?” (1= None, 2=1–4, 3=5–10, 4=11–20, 5=More than 20), NSSE 2008 responses are shown in brackets, ()

<table>
<thead>
<tr>
<th>Length of Report</th>
<th>UW Mean</th>
<th>Ontario Mean</th>
<th>U15 Mean</th>
<th>Public Institutions Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than 20 pages</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Year</td>
<td>1.55 (1.59)</td>
<td>1.40 (1.37)</td>
<td>1.37</td>
<td>1.25 (1.23)</td>
</tr>
<tr>
<td>4th Year</td>
<td>1.82 (1.85)</td>
<td>1.81 (1.85)</td>
<td>1.78</td>
<td>1.60 (1.59)</td>
</tr>
<tr>
<td>Between 5 and 19 pages</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>1st Year</td>
<td>2.18 (2.39)</td>
<td>2.30 (2.39)</td>
<td>2.21</td>
<td>2.15 (2.27)</td>
</tr>
<tr>
<td>4th Year</td>
<td>2.61 (2.63)</td>
<td>2.77 (2.86)</td>
<td>2.66</td>
<td>2.48 (2.54)</td>
</tr>
<tr>
<td>Less than 5 pages</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Year</td>
<td>2.53 (2.52)</td>
<td>2.50 (2.49)</td>
<td>2.48</td>
<td>2.90 (2.98)</td>
</tr>
<tr>
<td>4th Year</td>
<td>2.53 (2.43)</td>
<td>2.60 (2.55)</td>
<td>2.58</td>
<td>2.94 (3.00)</td>
</tr>
</tbody>
</table>

As Table 2 reveals, students at all institutions were required to write fewer long reports and more short reports in 2011 than in 2008. The University of Waterloo was no exception: while first-year students were required to write more long reports, on average, than students at other Ontario universities, the Waterloo figures were otherwise very close to the Ontario mean.
Internal analysis (S. Smyth, personal communication, 2012) shows that there is very little variation requirements between faculties at Waterloo for the shorter report but that there is some variation between the requirements for medium-length reports (from 2.13 for fourth-year mathematics students to 3.05 for fourth-year environmental studies students) and for longer reports (from 1.46 for fourth-year mathematics students to 2.24 for fourth-year environmental studies students).

The data in Table 2 indicate that while Waterloo students were submitting fewer longer written works in 2011 than in 2008, they were submitting more written work than students at comparable institutions. However, the data in Table 3 (shown below) indicate that Waterloo students were generally preparing fewer drafts of written reports (and therefore presumably having less opportunity to receive formative feedback) than students at other comparable institutions.

Table 3: NSSE 2011 and 2008 responses to Question 1 c: “In your experience at your institution during the current school year, about how often have you prepared two or more drafts of a paper or assignment before turning it in?” (1=Never, 2=Sometimes, 3=Often, 4=Very often), NSSE 2008 responses are shown in brackets, ()

<table>
<thead>
<tr>
<th></th>
<th>UW Mean</th>
<th>Ontario Mean</th>
<th>U-15 Mean</th>
<th>Public Institutions Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Year</td>
<td>2.12 (2.06)</td>
<td>2.34 (2.30)</td>
<td>2.26</td>
<td>2.67 (2.54)</td>
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<tr>
<td>4th Year</td>
<td>2.06 (2.12)</td>
<td>2.34 (2.32)</td>
<td>2.24</td>
<td>2.74 (2.31)</td>
</tr>
</tbody>
</table>

As Table 4 reveals, there has been very little change between 2008 and 2011 in how students believe their experience at Waterloo has improved their writing and speaking competencies. However, students felt their speaking competency developed less than their writing competency, and they generally perceive less development of writing and speaking competency than students at comparable Ontario institutions. This last point is ironic, given that the data in Table 2 indicate that students at Waterloo are expected to submit more written work than their peers at other Ontario universities.

Table 4: NSSE 2011 and 2008 responses to Questions 11 c and d: “To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?” (1=Very little, 2=Some, 3=Quite a bit, 4=Very much), NSSE 2008 responses are shown in brackets, ()

<table>
<thead>
<tr>
<th></th>
<th>UW Mean</th>
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<th>U-15 Mean</th>
<th>Public Institutions Mean</th>
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<td>Writing clearly and effectively</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Year</td>
<td>2.62 (2.63)</td>
<td>2.80 (2.78)</td>
<td>2.71</td>
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<td>2.82 (2.84)</td>
<td>3.02 (3.04)</td>
<td>2.95</td>
<td>3.07 (3.03)</td>
</tr>
<tr>
<td>Speaking clearly and effectively</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Year</td>
<td>2.38 (2.37)</td>
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<td>2.82 (2.86)</td>
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Work Reports and PD2: Part of the reason that Waterloo students report greater requirements for submitting longer written works is that students in co-op programs are required to write work reports or reflective essays (between three and four, depending upon the program). Work reports are expected to be relevant to the employer’s line of work or business practices and must contain an analytical component usually associated with the evaluation of a set of alternatives. Work reports are often, but not always, on a topic directly related to a task that the student has worked on during the work term. They are evaluated on their technical content, analysis, and written communication by the students’ academic units. Some academic units have separate evaluators for the grading of the technical content and the written communication, but other units use one evaluator per report to grade both technical content and written communication. Students receive feedback and a grade on each report, and the grades are reported on the students’ transcripts.

According to a 2010 survey of non-engineering co-op students (Pretti, 2010), the top three reasons students perceive for the work report requirements are to improve: i) technical report writing skills, ii) communication skills, and iii) analytical skills. In contrast, the top three skills that students say they developed through writing work reports are: i) report planning, organizing, and formatting, ii) following guidelines and instructions, and iii) written communication skills. In spite of these perceived benefits from writing work reports, students’ overall agreement with the statement “UWaterloo should continue to ask co-op students to produce work reports as a way of connecting work term and school learning” scored only 2.51 on a five-point Likert scale (1-strongly disagree, 2-disagree, 3-neither agree or disagree, 4-agree, 5-strongly agree).

Non-engineering co-op students take PD2 (Critical Reflection and Report Writing) during their first work term. This online module is offered to approximately 2,200 co-op students per year. The module includes a set of short writing exercises to build skill in proper grammar usage, reflection, and paragraph construction; a set of exercises on the mechanics of report formatting; and a report-writing exercise. Students write their report on one of four topics relevant to the co-op academic experience: learning styles, co-op as a model of learning, professional skills, and goal setting. Students are encouraged to submit a draft (which receives formative feedback) but do not receive any course grade for the draft. Students are required to pass the report-writing exercise in order to pass the module, and the PD2 report counts as the first required work report. Typical pass rates are between 80 and 90 per cent, while typical report averages are between 65 and 75 per cent.

Summary

In summary, there is a wide variety of opportunities for students to develop written competency and, to a lesser extent, speaking competency at the University of Waterloo.
However, these offerings are piecemeal, and the extent to which an individual student will be able to benefit from them depends upon the student’s program requirements, the student’s choice of courses, and the resource limitations imposed on instructors. Currently, the university lacks a universal institutional focus that ensures that all students have the language competencies to achieve the expected depth of learning in their discipline and to meet the expected graduate outcomes in language competency and communication.

4.1.3 Major Support Units
This sub-section reviews the capabilities of four major units that support language competency development at the University of Waterloo: the Writing Centre, the English Language Institute (Rension University College), the Conestoga Language Institute (Conestoga College), and the English Language and Literature Department. The sub-section concludes with a brief discussion of other units of support.

The Writing Centre
The Writing Centre is currently a support unit in the Student Success Office with four full-time staff members — a director, a coordinator of ELPE and Writing Clinic activities, a coordinator of graduate student services, and an administrative assistant — and 11 part-time writing instructors. The Writing Centre plays three primary roles:

1. administering the ELPE, including setting the exam, administering the writing of the exam, marking the exams, and reporting on overall student performance on the exam
2. supporting students who have failed the ELPE and are working to meet the ELP degree requirement
3. supporting graduate students in developing writing competency necessary for writing scholarly works, including theses and journal publications, and improving students’ speaking skills

In addition to these primary roles, the Writing Centre also offers five two-hour workshops on various aspects of “Writing for Success” and provides writing tutoring for all students. All of the activities offered by the Writing Centre are heavily subscribed, and most activities have waiting lists.

In considering how the Writing Centre resources align with the proposed vision for integrated and continuous language competency development within each academic program, the Task Force makes the following observations:

• The staff of the Writing Centre are a strong resource with skills and knowledge in diagnosing levels of writing competency and providing individual student support for
written and some oral competency development. These skills and knowledge will be necessary to implement the proposed vision.

- Since the proposed vision integrates language competency development into the academic programs, it will be necessary to ensure that the resources of the Writing Centre are connected to the academic programs. While it is beyond the scope of the present study to recommend a preferred reporting structure and organization for the Writing Centre, it is apparent that the centre’s resources can be best utilized and developed if it reports to the academic director responsible for providing leadership in language competency development (see Section 4.2.1).

- Care has to be taken in establishing the Writing Centre’s physical space so that students do not associate any stigma with being seen in the space. In many institutions, similar support units are located in general student services complexes.

- The resources of the Writing Centre need to expand to include other language competencies, including reading, speaking, and listening.

**The English Language Institute**

Founded in 1994, the English Language Institute (ELI), based at Renison University College, offers three primary programs:

- a set of credit English as a Second Language (ESL) courses developed for registered Waterloo students
- English for Academic Success (EFAS), an intensive, non-credit study program in ESL to develop English skills and prepare NNES students applying to Waterloo for academic success
- Applied Language Studies (APPLS) for students interested in teaching or doing advanced studies in the field of ESL

ELI offers three ESL credit undergraduate courses (ESL 101R, ESL 102R, and ESL 129R) for undergraduate students and three ESL credit graduate courses (ESL 601R, ESL 6102R, and ESL 612R). In the 2010–11 academic year, 458 students were enrolled in the three undergraduate courses and 230 students were enrolled in the three graduate courses. ESL 102R and ESL 129R are ELPE replacement credits, and 80 to 85 per cent of the students in these courses are taking them to meet the ELP requirement.

EFAS runs four 14-week sessions per year. Three of the sessions have enrolments of 85 students, and the summer session has an enrolment of 140 (including a special six-week program for 2+2 students).
In Fall 2010, ELI and its programs underwent an external review under the *Guidelines for Academic Program Reviews at the University of Waterloo* (Cumming, Olson, & Sullivan, 2010). The external reviews recognized the expertise and leadership in ESL education that ELI provides to the Waterloo academic community and wider Canadian communities. The review goes on to make four broad recommendations:

1. Develop an overall strategic plan for an expanded role for ELI at the university.
2. Consolidate and validate curricula and assessments in relation to academic genres.
3. Expand and regularize personnel.
4. Utilize facilities and resources strategically.

The findings of the Task Force reinforce the first two recommendations of this earlier review.

In considering ELI’s alignment with the proposed vision of integrated and continuous language competency development within each academic program, the Task Force makes the following observations:

- Consistent with the first recommendation of the 2010 program review, ELI is well placed to provide expanded capacity for the envisioned pathway for international NNES students (see Section 3.1). As the present report was being prepared, ELI, in conjunction with the office responsible for international recruitment, put forward a proposal for a new pathway, Bridge to Academic SuccEss (BASE). This proposal is well aligned with the pathway the Task Force has envisioned.
- ELI has expertise to help train instructors across the campus on the development of language competencies of NNES students in discipline core courses as evidenced by its experience training and educating ESL teachers and the experience it gained in the pilot study of NNES student support in a core economics course (Nguyen, Trimarchi, & Williams, 2012).
- The admission and graduation requirements of both the EFAS pathway and the proposed BASE pathway differ somewhat from those of the Math/ELAS pathway (see below). There is currently only limited data on the success of EFAS graduates in Waterloo programs. As more data becomes available, it is expected that the findings will be used to determine to what extent variations in admission and graduation requirements are appropriate or necessary.

**Conestoga Language Institute (Conestoga College)**

Since 1991, the Faculty of Mathematics has offered a pathway program for international students in collaboration with Conestoga College. As part of the admissions process, the faculty identifies international NNES students who have undergone secondary schooling in non-English
institutions and who demonstrate excellent mathematical background knowledge and potential but do not meet the Waterloo required admission standard for English language competency (i.e., standardized test scores or other means as identified in section 3.1). These students are offered conditional admission to a regular mathematics program based on successfully completing one term of study in the English Language for Academic Studies (ELAS) program offered by the Conestoga Language Institute.

In the ELAS program, students take one on-campus, first-year mathematics course at the University of Waterloo (usually MATH 137, Calculus 1 for Honours Mathematics) plus five Conestoga language competency development courses: Written Communication Skills, Pronunciation, Reading Comprehension, Listening and Speaking, and Student Success for Higher Learning. The five language competency courses are taken at a Conestoga College campus in Waterloo and are scheduled so that students can take the on-campus mathematics course at 8:30 a.m. and then take the local transit bus to the College campus. To successfully complete the program, students are required to achieve a grade of at least 70 per cent in each of the language competency courses and a grade of at least 50 per cent in the mathematics course. Students who exceed most of the requirements but fall short in a particular skill or area may be allowed to proceed on the condition that they take an explicit strengthening program on writing, reading, or mathematics to improve their weak area.

Fall enrolments have grown since 1991 and are currently between 200 and 250. Typically over two thirds of the students in the program successfully proceed to full-time studies in a regular mathematics program. For the mathematics classes that entered in the fall terms of 2002 through 2005, the percentage of students who graduated with degrees in mathematics was 73 per cent for non-ELAS students and 82.0 per cent for ELAS students (D’Alessio, 2012).

The Task Force makes the following observations about the Math/ELAS program:

- The graduation rate data shows clearly that Math/ELAS prepares students well for academic success in the mathematics programs.
- While having the ELAS courses offered off-campus ensures that there are sufficient rooms for the classes, especially in fall terms, this off-campus component is a barrier for the participants’ full integration into the Waterloo campus environment and may unintentionally delay language and cultural understanding and integration.

**The Department of English Language and Literature**

The English Language and Literature Department has 29 regular faculty members and offers three- and four-year general degree programs and three honours programs in Literature, Literature and Rhetoric, and Rhetoric and Professional Writing, with potential specializations in Digital Media Studies and English Literature in a Global Context. The department offers a wide
range of courses both online and on campus to support these programs and to teach writing to students from other programs.

The department provides two particularly heavily subscribed service courses that focus on the development of written competency: ENGL 210F (Genres of Business Communication) and ENGL 109 (Introduction to Academic Writing). ENGL 210F is offered online three terms per year and has an annual enrolment of 1,200 to 1,500 students. In this course, students learn to recognize a variety of common workplace genres and practise their core writing and rhetorical skills in a range of these genres.

ENGL 109 is offered both online and on campus three terms per year. The on-campus enrolment is limited to 150 students per term, while the online enrolment exceeds 1,000 students per year. In this course, the emphasis is on developing writing competency through a process of draft writing, peer editing, and revision (possibly for many cycles). The on-campus version has one hour of lecture per week, delivered to the complete class of 150 students, and two hours of tutorials for individual sections of 25 students. The demand for this course exceeds the available capacity.

In considering how the English Language and Literature Department aligns with the proposed vision for an integrated and continuous language competency development within each academic program, the Task Force makes the following observations:

- One focus of the department is on writing genres in a wide range of academic and workplace contexts. This focus ensures that the department’s expertise in teaching writing can potentially be integrated into a wide range of programs in the university.
- The department has significant expertise in teaching writing competency to large classes of students that include both NES and NNES students.
- The listening and speaking language competencies are not emphasized in the department’s course offerings.

Other Units of Support

Many other units within the university also offer experience and expertise in the development of language competency. They include the following:

**The Centre for Extended Learning (CEL):** provides support for developing online courses that replicate the positive features of on-campus learning and take full advantage of the benefits of online media
The Centre for Teaching Excellence (CTE): provides support for the design and development of courses to help achieve desired learning outcomes and develop teaching strategies that support deep learning.

The English Department at St. Jerome’s University: developed and offers the well-subscribed ENGL 119 (Communications in Mathematics & Computer Science).

Co-op Education and Career Action (CECA): has knowledge of employer expectations for workplace communication skills and provides guidance in the development of interview skills.

Drama and Speech Communications Department: offers courses that develop speaking competency.

WatPD: offers PD2 (Critical Reflection and Report Writing), as well as expertise in developing a pool of graduate and senior undergraduate graders and training these graders to provide timely and meaningful feedback in the online environment.

4.2 Proposed Infrastructure

4.2.1 Central Leadership and Coordination

Enabling the proposed vision for developing the language competency of all students continuously throughout their academic programs will require a culture change within the university. Specifically, the Task Force is asking the university community to adopt the development of language competency for life success as a core value. For this kind of meaningful change to occur, it must happen within the academic units responsible for developing and delivering academic programs. However, the units will need both leadership and support for the envisioned change.

As can be seen in the previous section, there is a considerable breadth of expertise available in a range of units to help support the development of courses and teaching strategies for systematically developing language competency. While there are some units that can provide major support in this endeavour, no single unit has the complete range of required expertise (i.e., writing, speaking, reading, and listening competencies for NES and NNES speakers; strategies for promoting deep learning; online teaching strategies; etc.). Therefore, supporting the envisioned change will require a collaborative effort between many units, including the ELI, the Department of English Language and Literature, the Writing Centre, CEL, CTE, and others.

In order to provide leadership at the institutional level and to facilitate the collaboration of the various support units, the Task Force recommends appointing an Academic Director for English Language Competency, reporting directly to the Associate Vice-President, Academic Programs.
and Strategic Initiatives. It is envisioned that the Academic Director will be able to draw upon a working group of faculty and staff to help guide and implement change. Besides drawing upon support from the units with expertise in the development of language competency, the Academic Director may also wish to involve the newly instituted Associate Deans/Teaching Fellows (or equivalents) to help coordinate and lead the envisioned changes within each faculty.

4.2.2 First Steps: Pilot Studies
As mentioned above, the Task Force recognizes that the proposed vision requires very significant change within the university. While there is considerable evidence at other institutions that the proposed commitment to language development leads to significant benefits in terms of the depth and effectiveness of student learning both in the academic and workplace environments, this evidence is perhaps too remote to the Waterloo context to be meaningful at the general academic level. The Task Force therefore recommends that the first steps be focused on a range of pilot studies over the next two years to establish best practices and to demonstrate expected benefits within the Waterloo context. Possible pilot studies include the following:

- Implement a bridging pathway for NNES on a trial basis for the fall 2013 and fall 2014 admission cohorts.
- Develop model foundation core courses (likely based on existing courses) for students in two to four academic programs for the 2013–14 and 2014–15 academic years. Hopefully, from this small group of model courses, it will be possible to demonstrate a range of teaching strategies (i.e., a range of levels of blended learning).
- Develop a set of discipline-specific core courses (again, possibly based on existing courses) for the 2013–14 and 2014–15 academic years that include the development and practice of language competency as an explicit and significant course outcome. Again, it is hoped that this group of courses will demonstrate a range of teaching strategies.

4.2.3 Comment on Resources
To achieve the intended benefits of the proposed vision, the university must be prepared to provide the resources necessary to implement and sustain the envisioned courses and curriculum activities. During the period of transition and implementation, resources will be required both to develop new curriculum components and to support the development of instructors, particularly those in the various disciplines. Once the transition is completed, resources will still be required to support continuous feedback to students — feedback that is
an integral part of competency development — as well as the ongoing support of instructors in various disciplines to whom competency development may not be a natural teaching skill.

It was beyond the scope of the present study to estimate the cost of providing these resources. The Task Force did note that in the 2011 calendar year, 3,600 students (approximately one half of an incoming first-year cohort) took an entry-level writing course. This number does not include students who took discipline-specific courses that emphasize language competency development. Thus the university already recognizes the benefits of investing in language competency development.

Implementing the proposed vision will require further investment. There is an inherent community of instructors in the university who will readily and naturally wish to contribute to implementing the proposed vision. While the passion and enthusiasm of this group can play a significant role, it is crucial that the institution recognize passion by itself will not be sufficient to enable and sustain the level of change envisioned by the Task Force. Achieving the vision cannot be at the expense of these dedicated and committed instructors. The university must make a clear commitment to investing resources to ensure that the vision is realized and maintained for future generations of Waterloo students.
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Further Readings


