

Silvia Pessoa, Ryan T. Miller and David Kaufer

Students' challenges and development in the transition to academic writing at an English-medium university in Qatar

Abstract: Drawing on data from a 4-year longitudinal study of literacy development at an English-medium university in Qatar, this paper aims to document the challenges and development of multilingual students' literacy skills in their transition to college. Interviews reveal students' challenges during the first semester in terms of reading comprehension difficulties stemming from limited vocabulary knowledge, background knowledge, and reading stamina; in addition, students describe difficulties understanding the genre expectations and style of English academic writing. Despite these challenges, interviews also reveal development in students' academic reading and writing as their understanding of college writing expectations and their use of learning strategies and resources increase. In addition, analysis of student writing using corpus-based text analysis software reveals indicators of academic writing development such as increase in the use of academic register, elaboration, and reasoning. Together, these findings contribute to an understanding of challenges and academic development of students in English-medium universities.

Keywords: academic writing development, Qatar, English-medium education, DocuScope

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1 Introduction

As the world becomes more globalized, higher education is changing to prepare graduates to compete in the highly competitive knowledge-based global market. Qatar, a small but wealthy nation in the Arab world, is very aware of this shift and has invested greatly in education through the establishment of English-medium branch campuses of Western universities. Beyond the cultural impact of these

Silvia Pessoa: Carnegie Mellon University–Qatar. E-mail: spessoa@andrew.cmu.edu

Ryan T. Miller: Carnegie Mellon University–Qatar. E-mail: rtmiller@andrew.cmu.edu

David Kaufer: Carnegie Mellon University–Qatar. E-mail: kaufer@andrew.cmu.edu

changes on Qatari society and identity (e.g. potential Arabic language loss and the “westernization” of its youth), it is important to document the outcomes of this investment in terms of students’ academic development as Qatar continues to invest heavily in developing the region’s human capital through English-medium education. At a broader level, several branch campuses are being opened all over the world (e.g. Nottingham and New York University in China), and it is important to understand what kinds of effects they are having on students.

Focusing on the Qatar campus of Carnegie Mellon University, this study aims to document multilingual students’ challenges and development in their transition to college writing demands in English. In this article, we will first describe the context of the nation of Qatar and changes occurring in its educational system. Then, through examination of interview data and analysis of writing samples collected during students’ first year of undergraduate study, we will investigate the challenges of academic writing that students encounter, how they overcome these challenges, and how their writing develops.

2 English-medium education in Qatar: Opportunities and challenges

With a population of less than 1.5 million people, of whom less than 1/3 are Qatari nationals, Qatar’s significant oil and natural gas reserves and progressive leadership give it a unique status in today’s world. Because the government is well aware that the nation’s gas reserves will not last forever, they have made it a priority to invest in developing human capital through an emphasis on English-medium education, as indicated in Qatar’s 2030 National Vision (General Secretariat for Development Planning 2008). In 2001 Qatar embarked on a major reform effort to better align the K-12 education system with the country’s changing economic, social, and political ambitions (Brewer et al. 2007). The intent is that this “Education for a New Era” reform will produce students who are better prepared for post-secondary education and for employment in English. Although Arabic is the official language of Qatar, most business is conducted in English, pointing to a high demand and real needs for English skills in the country (Stasz et al. 2007).

At the K-12 level, the reform resulted in the creation of more than 100 new independent gender-segregated schools.¹ These schools are free to determine their own teaching philosophy and methods, provided that they meet the reform’s rigorous curriculum standards in Arabic, English, mathematics and science (Brewer

1 77 additional government-funded schools are in the process of becoming independent schools.

et al. 2007). With the goal of preparing students to enter English-medium universities in Qatar and, beyond that, a globalized workforce, the State of Qatar has also specified that mathematics, science, and English should be taught in English in these schools, with Arabic, Islamic studies, and social studies taught in Arabic. In the English standards, there is a strong and increasing emphasis on literacy development across the grades with a focus on the reading and writing of a variety of text types (Supreme Education Council 2004).

At the university level, Qatar has also experienced a shift toward English-medium education. Qatar University, the public university founded in 1973, started an education reform in 2003, which involves transitioning to English-medium education (Moi et al. 2009). In Education City, funded by the Qatar Foundation (<http://www.qf.org.qa>) and established in 1995, the implementation of six co-educational American universities taught solely in English is a revolutionary step in modernizing Qatar's educational system. These American universities offer undergraduate programs to more than 2,000 students from 90 different nationalities. The six universities were invited to Qatar because they were viewed as being among the best in the world in fields of study that can contribute to the region's development. Virginia Commonwealth University was invited to offer degree programs in design, followed by Weill Cornell Medical College, Texas A & M's engineering programs, Carnegie Mellon University's computer science and business administration programs (later expanded to include programs in biological sciences, computational biology, and information systems), Georgetown University's School of Foreign Service, and most recently Northwestern University's journalism and communication programs.

Although acceptance to these institutions is competitive, free tuition is offered to Qatari students and interest-free loans are available to non-Qataris. According to Wildavsky (2010: 55–56), “although in principle, admissions standards [to these universities] are just as rigorous as those at the universities' home campuses” and “every degree issued [. . .] is identical to those issued at the home campus [. . .] professors and administrators acknowledge that the curve of abilities is a bit lower than at home, partly because of the uneven preparation of students from the region.” While many students have attended English-medium secondary schools, in many cases their written English lags behind their speaking abilities, even after attending a year-long foundation program housed in Education city, called the Academic Bridge Program.² This program aims to prepare students to apply for the universities in Education City by helping them develop their academic reading and writing English skills, and communication,

2 For more information about the Academic Bridge Program, visit <http://www.abp.edu.qa>.

math, and computer skills, while helping them get used to a co-educational learning environment and learn about college expectations.

Progress in the educational system in Qatar is clearly being made, but Qatar still faces a number of challenges. Qatar continues to lag behind in international test scores in both English and Arabic (Organization for Economic Cooperation and Development 2007; International Association for the Evaluation of Educational Achievement 2006). As a result, a new educational initiative at the K-12 level is to return to teaching science and mathematics in Arabic. While the universities in Education City have successfully graduated more than 1,500 students to date, it is not uncommon to find fourth year students in Education City continuing to struggle with the literacy demands of their discipline, observed particularly in their writing skills, as judged by the authors' experience teaching and researching literacy in Qatar. Clearly, there is still much to be done in Qatar for students to fully develop their academic reading and writing competencies in English.

3 Carnegie Mellon University in Qatar: Meeting Qatar's educational goals

Carnegie Mellon University in Qatar (hereafter CMU-Q) joined Education City in 2004 and currently offers five undergraduate programs: biological sciences, business administration, computer science, computational biology, and information systems. With a student population of 335 (52% female, 48% male) from 39 different nationalities (36% Qatari), CMU-Q has graduated 330 students to date. Following the main campus, admission standards are high, with TOEFL scores in the 100s and SAT sub-scores in the 600s. Once admitted, students are held to the same rigorous standards as their counterparts in the USA.

CMU-Q purposefully offers a variety of resources in order to encourage and support student success. At the curricular level, CMU-Q offers a common curricular experience for all first-year students, including a sequence of two English courses (English 100 and English 101). While the first-year English courses provide students with opportunities to develop general academic literacy skills and strategies, in the second year, communication courses within each of the five academic programs help students to develop skills that prepare them for writing genres specific to their discipline, such as business plans for the business administration students and user guides for the information system students. Outside the classroom, various programs equip students with the skills and knowledge necessary to be successful in their first year at CMU-Q and beyond. Student-run organizations provide meaningful hands-on leadership learning opportunities

and other programs such as community service initiatives promote student citizenship. With such goals and programs, CMU-Q contributes to Qatar's 2030 National Vision and goals of English-medium education to prepare students to join Qatar's global knowledge-based economy.

Although CMU-Q emphasizes the development of students' academic literacy across the curriculum by requiring two English courses and a communications course specific to each major, challenges are still present. The students that are admitted to CMU-Q vary dramatically in their exposure to and experience with reading and writing academic texts in English. Although students make great progress throughout their CMU-Q education, faculty often note the weak writing skills among some fourth-year students. Also, while there are numerous efforts to include writing tasks in many courses, not all instructors have the same knowledge about and interest in writing practice across the curriculum. Thus, it is important to learn more about the challenges experienced by students as they enter CMU-Q as well as the development of students' academic writing skills in order to evaluate the extent to which this specific university is meeting the educational goals of a country that aims to enhance its human capital through English-medium education.

4 The study

In an attempt to understand students' challenges and personal and academic development in their transition to college, this study draws on interview data and analysis of student writing. This study is part of a larger 4-year longitudinal study of the literacy development of the class of 2013 ($N = 86$) at CMU-Q. Given the non-linear nature of writing development and its dependence on various contextual factors (Sternglass 1997), we draw on ethnographic approaches to documenting academic literacy development (Hyland 2009; Ortega & Byrnes 2008).

Although previous studies have helped us understand writing experiences and development at the undergraduate level (Carroll 2002; Curtis & Herrington 2003; Sommers 2008), the lack of longitudinal analysis of student writing in these studies leaves us with one question: What exactly develops? Statements such as *student writing became more fully developed, more coherent, and more surely articulated* are hard to validate without theory-based text-level evidence. Applebee (2000) argues that writing development is ill-defined and difficult to assess. Similarly, Wray and Medwell (2006) point out a lack of agreement on what is meant by improvement or expectations toward development.

This study adopts the framework of Systemic Functional Linguistics (SFL) (Halliday & Mathiessen 2004) to document students' writing development. SFL

provides language-driven tools for the analysis of academic writing and its development. According to SFL, features of academic registers include: use of abstract and technical vocabulary, level of formality realized through the use of declarative mood and third person, and the use of planned organizational features such as conjunctions and metadiscourse (Schleppegrell 2004). As students' writing develops, they leave behind features of informal spoken registers to adopt features of academic language. Specifically, narrative and descriptive genres that rely primarily on "congruent" (every day) and concrete language change to more "incongruent" forms of meaning-making, marked by the development of abstractions, nominalizations, technical vocabulary, evaluation, references to literature, and critical analysis (Byrnes 2009; Christie & Derewianka 2008; Ravelli & Ellis 2004; Woodward-Kron 2002, 2008).

Although SFL provides appropriate tools for the analysis of student writing development, SFL-based text analysis is time consuming. Hence, this study implemented a corpus linguistic approach that has conceptual similarities to SFL to analyze a large number of texts. We used the rhetorical analysis software DocuScope, a dictionary-based program that automatically identifies, classifies, and stores word strings. DocuScope is based on a representational theory of composition (Kaufers & Butler 1996, 2000), which asserts that the rhetorical effects that a reader perceives are the result of linguistic choices that an author makes. Like SFL, DocuScope views linguistic choices and their functional basis as the core of text analysis.

DocuScope contains 45.5 million unique patterns of English classified into 112 categories of rhetorical experience that are arranged into groups called dimensions, which are further grouped into clusters. For example, DocuScope tags the pronoun "I" as a "first person" effect, "if" as associated with a "contingency" effect, and "might happen" as an "uncertainty" effect. DocuScope scans a corpus of texts and counts the number of patterns found for each rhetorical effect. An advantage of DocuScope is that its coding system contains both single words and longer strings (up to 17 words in length); for example, while "I" is coded as "first person", the phrase "in this paper, I will" is coded as metadiscourse indicating the structure of an essay.

Based on descriptions of academic writing in the SFL literature, we examined the DocuScope variables for conceptual similarities. We found seven DocuScope clusters which are conceptually related to SFL-based descriptions of academic writing development. Of these, increases indicate academic writing development in five clusters (Institutional Register, Academic Register, Reasoning, Elaboration, and Reporting.); in two clusters, decreases indicate academic writing development (Description and Narrative). These are described below.

Institutional Register contains two relevant dimensions, Public Sources and Public Responsibility. According to Veel and Coffin (1996), as language becomes more academic, there is less reference to individuals as the subject matter, and instead there is greater occurrence of en masse, institutional representations. This is similar to the dimensions of Public Sources, which includes reference to public media, publications, or institutions, and Public Responsibility, which indicates a source that accepts public responsibility for an action. Additionally, in terms of interpersonal resources, academic writing development is marked by a move from personal feelings and emotions to “more judicious evaluation of behavior and phenomena based on institutional norms” (Christie & Derewianka 2008: 15). This is similar to the dimension of Public Values.

The Academic Register cluster contains three dimensions: Abstract Thought, Citing Others, and Metadiscourse. Academic literacy tasks involve increased use of language that indicates intangible, abstract concepts (Schleppegrell 2003). Abstract vocabulary, in particular nominalization, enables the condensing of information that is necessary in expository writing (Schleppegrell 2004). The dimension of Abstract Thought contains words indicating abstract concepts, among them a set of nominalizations. The intertextuality of citing the work of others is of great importance in academic writing as it can be used to provide justification for arguments and to support a writer’s claims (Hyland 2001). In addition, metadiscoursal signposts guide a reader’s understanding of a text, and students’ use of metadiscourse can help them to manage the flow of information as texts become more complex. In academic texts, the writer needs to use metadiscourse to maintain coherence and to signal to the reader how the text is developing (Christie & Derewianka 2008).

The Reasoning cluster indicates logical connections between information, which is important for constructing an argument in academic writing. As writing becomes more academic, it leaves behind the temporal organization of narrative and it instead adopts organization based on causation (Schleppegrell 2004; Veel & Coffin 1996), which is indicated through the Reasoning cluster. When students are able to indicate where the argument is headed and reiterate where it came from, the argument is more likely to be convincing (Ravelli 2004).

The Elaboration cluster includes the dimensions of Definition, Exemplification, Generalization, and Specification. In complex contexts of language use, such as academic writing, the language itself must also show greater levels of elaboration and abstraction (Achugar, Schleppegrell, & Oteiza 2007). Through use of the linguistic resources of elaboration, the writer can make ideas in a text more explicit.

Verbs in the Reporting cluster are often found in expository writing (Kaufer et al. 2004), which is a genre that is emphasized in American academic writing

(Schlepppegrell 2004), and is required in the English 100/101 course sequence. These verbs contrast with verbs of narration, which are used to tell a story rather than to report.

The two clusters in which a decrease would indicate academic writing development are Description and Narration. Within the Description cluster, the dimension of Sensory Language includes descriptive language that appeals to the senses. Because language that appeals to the senses is described from the point of view of an individual, the effect is that of a more subjective description. Christie and Derewianka (2008: 19) state that “in academic writing, personal affective response is usually not valued”, and thus we expected this variable to decrease as writing becomes more academic.

In addition, variables within the Narrative cluster were also expected to decrease. As students progress through school, they are increasingly expected to write factual and analytical genres (such as reports or expositions), while personal genres such as narrative are less common (Christie 2002; Schlepppegrell 2004). The development of academic writing skills includes being able to move away from narrative description, and on to analysis and abstraction (Ravelli 2004).

4.1 Methodology

Through interviews and text analysis, this study aimed to document challenges and development in academic writing among 86 students who entered CMU-Qatar in 2009. Out of the 86 students, 30 students were recruited to participate in interviews as part of a focus group. These students formed a representative sample at CMU-Q based on the following variables: gender, nationality, major, type of school (e.g., international, local, transitional program), language of instruction in high school, test scores, experience with academic literacies (extensive vs. limited), perception of academic reading and writing skills, and attitudes. Of the 30 students invited, 23 participated in the interviews. They were interviewed at least once per semester from the fall 2009 semester until the spring 2013 semester. The interview data presented in this paper mainly focus on students' experiences in their first semester at CMU-Q, with a particular focus on their experiences with reading and writing for academic purposes, challenges and coping strategies used, and their perceived development during the semester. The semi-structured interviews were conducted in the first author's office in English and lasted for approximately one hour. They were audio and video recorded. The interviews were transcribed and analyzed following a modified form of grounded theory approach (see Emerson 2005). See Appendix 2 for the interview protocols.

In addition to the interviews from a subset of 23 students, we analyzed all 86 students' writing in two English courses: English 100 (Reading and Writing for Academic Contexts) and English 101 (Interpretation and Argument). English 100 is the first course in a two-semester sequence required for all first-year students at CMU-Q. It is a course taken before what most programs call freshman composition, but not remedial. The course assists students' transition from secondary-school communication practices to university-level practices, and facilitates the development of disciplinary expertise and independent learning across academic fields through extensive reading and academic writing. Through intensive reading, the goal of these courses is for students to become experts on an issue so that they can contribute to an academic conversation about this issue. In English 100, which focused on the topic of environmental sustainability, students wrote four papers. The first paper was an explication of a single text's argument. The second paper asked students to create an argument for how they believe society should react to an issue presented in one of the course readings. The third and fourth papers asked students to compare two readings and argue for the importance of a similarity (third paper) or difference (fourth paper) between the arguments presented in those readings that many readers may not have realized.

Building on these, students wrote three papers in English 101 based on the topic of cloning. The first paper was an argument analysis in which students explain in their own words another writer's argument about an issue. In the second paper, students synthesized a number of distinct arguments into one coherent description of an issue. Lastly, in the third paper, students analyzed an issue, took a stance, and made a persuasive argument of their own. In both courses, students engage actively in the writing process by producing multiple drafts and receiving substantial written and oral feedback from their instructors. In this study, a total of 7 texts from each of the 86 students over a two-semester period (English 100 and 101) were analyzed (602 texts total, 3–8 pages each). These texts were the final drafts of each of the papers in both courses.

The texts were analyzed using the DocuScope software, and the resulting data were examined longitudinally for indicators of academic writing. We interpreted the DocuScope results in two ways. First, we isolated two sets of variables that we felt did not contribute to academic writing and for which we found no particularly interesting trend to describe: a) variables that were more related to the topics being written about, and not to features of academic writing, for example sadness (language referencing sadness, such as “Many innocent civilians have died”) and fear (language referencing fear, such as “The environment was threatened by mankind”); and b) variables that may be a result of specific writing tasks such as language indicating comparison, as its use was more prominent in the compare and contrast papers in English 100. Second, we looked for trends

that served as indicators of academic writing development. These trends indicated either a) increases in the use of certain linguistic and rhetorical features prominent in academic writing (Institutional Register, Academic Register, Reasoning, Elaboration, and Reporting) or b) decreases in the use of certain features that are more prominent in informal oral or non-academic language (e.g., Description and Narrative). Descriptions and examples of these features are in the Results section. Before presenting the results, we provide a brief summary of the demographics and characteristics of the student population under study.

4.2 The participants

There are a total of 49 female and 37 male students in the class of 2013, with 34% of Qatari nationality, 36% representing various Arab nations, 25% of the Indian Subcontinent, and the remaining 5% representing other countries. Eighty percent of the students attended English-medium high schools. The students' average IBT TOEFL score was 97 upon admission. Students coming from country-sponsored schools such as the American School of Doha and the Indian schools (elite schools for expatriates living in Qatar) had higher scores and more experience with academic literacy practices in English than the students from other international schools and the local government-sponsored and independent schools. This study draws on data from 23 focal students in the analysis of student interviews (See Appendix 1 for background information about these students). In addition, data from all 86 students is included in the analysis of student writing.

5 Results

In this section we provide the findings from student interviews with a focus on their challenges with academic writing and their perceived development. We then proceed to the findings of analysis of student writing from two English courses.

5.1 Challenges and development from the students' perspective

After a semester at CMU-Q, 23 focal students reported a range of challenges that they faced in their transition to college. While the majority of the students struggled with time management, students coming from government schools or in-

dependent schools reported the most challenges. Among the challenges, most notable was their limited experience with reading and writing:

In high school we only wrote 100–250 words in English class. They [the teachers] give you the topic. The students write paragraphs for each topic and memorize each paragraph without thinking (Dima)³.

In addition, the students reported having poor reading comprehension skills and reading stamina:

When reading, I get lost, I have to go back and read and translate and learn (Habib).

The problem with the reading is that they are so long and we don't have the time. And for me I have to read the text twice in order to understand [. . .] At the beginning I was reading each chapter each day, but now I am lazy because most of the paragraphs I read I don't understand, so I read less. And for the study questions I just check the text and find it on Blackboard. I find the keywords that are close to the questions and try to figure out what the answer will be (Tahir).

Poor reading comprehension seemed to have resulted from students' limited vocabulary and lack of background knowledge, especially when reading history texts⁴ for which they had very little background, as exemplified in:

This is my problem in reading and writing, my vocabulary. I don't understand. I have to translate. If I don't understand the reading, then I won't be able to write (Dima).

Everyone knew what they were talking about. I felt so ignorant. They were talking about things I didn't see in the text; I didn't have knowledge of agriculture, things I didn't have background on (Leila).

When writing, some students struggled with grammatically correct sentences, argument construction, organization, and use of sources:

For Paper 1, I had no idea how to do an argument. I didn't know what an argument is. I've never done this before. I had to learn this. I had to make a strong argument. The first comments I had were, 'you don't have a strong argument', or 'you don't have an argument' (Habib).

I feel more confident now. I know how to cite. I couldn't do it before. I didn't know what it was all about. I didn't know we had to have a reference page (Leila).

³ All names used are pseudonyms; see Appendix 1 for additional demographic information about students.

⁴ In the first year, the students took a world history course and found the reading texts for this course very difficult.

To address these challenges, students used a variety of strategies and resources to succeed. The following comment shows the different strategies and resources that some conscientious students used:

In my second paper I was, no, no I am not getting a C. I have to bring that up, so that paper I think I wrote it five times before the actual [final] paper [. . .] I wrote it and then I went to one of my friends and asked her to check it for me. Then I went to the teacher and asked him to check it for me, then rewrote it myself. I did my own thing, and then I kept doing it over and over and then I got an A-. That was a big change, but that was because I put so much into it. It doesn't come just like that; I have to put so much work to get it; it doesn't come easily (Karida).

Clearly, to succeed in her writing, this student used the resources available by seeking help from her peers and instructor. In the first semester, students sought help from their peers more frequently and engaged in group reading to enhance their comprehension. In the second semester, they realized the importance of taking advantage of professors' office hours for help: they planned their time accordingly so as to meet their professor before the final submission of their assignments.

In terms of literacy development, the findings suggest progress in students' reading and writing abilities. Students talked about their perceived progress in reading and writing, and about less reliance on translation:

I would have little sub points and I wouldn't connect them to the main arguments and everything was scattered. There was no flow in the papers, and like now I have all that both the transitions and stuff, so I have been able to structure more. I have my central argument and I actually move better from one idea to the other. My first paper actually helped me in doing that because when I did it, I saw the comments and I even came to you for help, so it was helpful (Serena).

I used to translate each word [. . .] I don't translate the words [now], [. . .] like now I don't care about that because I think I can explain what I have read in my own words that I know. Even when I am using simple words, it is not necessary to go for very complicated words that I don't know, like by next year or next two years I will learn that word and practice it (Lamy).

While this study primarily draws on interview data from the students' first year, it is important to note that academic literacy development was even more prominent in the second year when students were more focused in their area of study. Their reading and writing became more automatic, and their reliance on compensatory strategies was not as noticeable. Perhaps the most revealing indicator of students' understanding of discipline-specific writing is seen in the following comment by a student in the beginning of her second year.

I learned these things about writing, but I don't think about them when I write. It comes with writing; it comes more naturally. I don't say: I learned this, I have to apply it here. For me, I feel that in every course I have to follow a certain style of writing, like it depends on the type of document you are writing. Even for *Writing in the Professions*, you have to write differently if you are writing to a friend or a manager. Each course has its own style of writing. In every paper you have to write an argument. What would you write if you don't have an argument? (Najwan)

This comment reveals Najwan's enculturation into the academic community. Writing became an automatic practice. She became able to transfer, apply, and use general writing practices with ease, and she began to understand disciplinary writing differences. Her comment "what would you write if you don't have an argument" shows her understanding and appreciation of argumentative and critical writing in college, something she struggled with in the first year. In fact, a majority of the second year case study interviews revealed the students' development toward a better understanding of writing expectations for academic purposes. The students no longer had to think about how to write a paper because practices such as having a central argument with supporting evidence and organizing ideas into clear paragraphs with appropriate topic sentences became automatic and internalized. However, due to the slow nature of academic writing development, these skills were not always visible on paper (see next section for the findings of text analysis).

In summary, interview data revealed students' challenges with academic literacy in their transition to college, as well as their perceived progress in their first year. After the first semester, students became more self-aware of their strengths and weaknesses in their reading and writing skills. They developed a better understanding of the linguistic features of academic writing in English, different writing expectations across the curriculum, and importance of purpose and audience in writing. They also showed progress in their attitudes as college students. They began to understand the consequences of their poor time management and procrastination, and started to use coping strategies and available resources in order to succeed academically. The analysis of students writing samples presented in the next section further reveals how this overall personal and intellectual maturity translates into writing development at the text level.

5.2 Student writing development in the first year

As described earlier, students' writing development was measured using the DocuScope software tool. The specific variables analyzed in the present study are those which were hypothesized to be present in more academic writing (Insti-

tutional Register, Academic Register, Reasoning, Elaboration, and Reporting), and those in which an absence would be an indicator of more academic writing (Description and Narrative).

Table 1 shows variables hypothesized to increase over time as writing becomes more academic. Numbers indicate the mean number of patterns per 1000 words of text in each of the 7 assignments in English 100 and English 101 (602 total texts) (see methodology section for the topic of each paper). Explanations of each variable appear later in the results section. For more detailed descriptions of each variable, see Kaufer, et al. (2004). In the first-semester course (English 100),

Table 1: Variables hypothesized to increase with academic writing development

[Cluster]/Dimension	English 100				English 101		
	1	2	3	4	1	2	3
[Institutional Register]							
Public Responsibility	0.57	0.79	0.70	0.41	0.26	1.16*	0.84
Public Sources	9.81	10.76	13.36*	9.80†	19.92*	12.79†	14.63
Public Values	24.95	26.64	28.36*	32.98*	30.83	31.37	31.94
[Academic Register]							
Abstract Thought	60.68	82.91*	80.95	87.72	107.86*	82.17†	85.55
Citing Others	12.86	6.70†	13.63*	11.76†	18.65*	15.85†	11.76†
Metadiscourse	2.47	3.35*	3.95*	3.91	4.17	3.95	3.75
[Reasoning]							
Constructive	7.49	8.42*	6.72†	7.34	7.32	9.67*	9.99
Contingency	8.77	12.89*	11.06	10.33	5.34†	15.76*	15.13
Opposition	14.43	14.53	17.36*	15.28†	11.42†	18.86*	19.96
[Elaboration]							
Definition	0.21	0.04	0.20	0.30	0.27	0.70*	1.05*
Exemplification	0.58	1.39*	0.92†	1.46*	1.33	1.51	1.64
Generalization	3.36	2.47†	1.85	2.19	1.83	1.78	2.10
Specification	10.40	15.55*	14.30	15.36	19.17*	16.88†	17.90
[Reporting]							
Reporting Changes	7.01	16.03*	25.29*	14.29†	6.98†	12.83*	10.37
Reporting Events	25.45	28.69*	26.28	37.00*	30.77†	46.55*	44.72
Reporting Processes	17.96	23.74*	19.05†	21.32	18.13	17.96	17.18
Reporting States	15.16	21.38*	23.00*	20.97	14.92†	21.09*	21.89

Note: [] refer to clusters. Variables listed under each cluster are dimensions within that cluster.

* = Significant increase compared to previous paper ($p < .05$)

† = Significant decrease compared to previous paper ($p < .05$)

students wrote four papers with approximately four weeks between each paper; in the second-semester course (English 101), students wrote three papers with approximately five weeks between each.

The Institutional Register cluster includes language that invokes public registers and values, rather than those of individuals. Within this cluster, the Public Responsibility dimension includes language that indicates public responsibility for an action. Overall, instances of Public Responsibility were very low across all papers, with the exception of the second paper in English 101. This increase, however, seems to have been influenced by the subject matter of this assignment, which was a synthesis of arguments relating to the ethics of cloning. Because of this topic, students' writing alluded often to the responsibility of doctors, parents, and others to the ethical use of cloning.

Also in the Institutional Register cluster, the dimension of Public Sources relates to academic writing in that it involves language showing an authorized source from public media, publications, or institutions, rather than from an individual's point of view only. Public Sources can be seen in the following:

Thus, the committee⁵ urges all the sectors to obey this suspension period, prohibiting any instance of human cloning. As mentioned, Kass shares the same view as the National Bioethics Advisory Committee to place a ban on human cloning, but he elaborates on this argument. (Serena, 101, paper 2)

In contrast, in earlier papers, students tended not to include institutions as sources of information, and instead primarily indicated the point of view of individual authors, such as in the following:

They need to collaborate in order for foreign aid to succeed, according to Sachs. Ayttey urges that there is a lack of cooperation as well, but from the recipient nations. (Serena, 100, paper 2)

Students continued to attribute information to individual authors throughout all papers. However, it seems that, over the two semesters, students' use of sources and attribution of information became more sophisticated, and included attribution of information to a wider variety of sources, including both individuals and public sources.

⁵ Underlined text strings in examples are those which were identified by the DocuScope software.

The third part of Institutional Register is Public Values⁶, which includes words indicating public standards that most people either believe in or reject. Throughout the first semester, inclusion of Public Values increased steadily, after which it stayed consistent from the end of the first semester until the end of the second semester. For example, the following excerpts contain instances of evaluation based on societal norms of what is positive and negative, respectively:

Eco-effectiveness is using innovation to invent new products that assist in saving the environment. (Dima, 100, paper 4)

These policies do not recognize women for the work they do and are instead treated unequally and discriminated against. (Maria, 100, paper 4)

The cluster that is most closely related to academic writing development is the Academic Register cluster, which includes language that indicates abstract thought and concepts, citations of others' work, and language that guides the reader from idea to idea within a text (i.e., metadiscourse). The Abstract Thought dimension includes words that indicate intangible, abstract concepts, a feature that is often found in academic writing. An increase in Abstract Thought was seen from the first paper to the second paper in English 100. This can be seen in the following excerpts in which there are few instances of Abstract Thought in the first paper, but more in the second paper:

He starts waking up in the morning every day when the sunrise, bathed in the pond, and reinvigorated his nerves. He determined to change his routine without using any of the modern technologies that people are using in his era. He was very upset and concerned about civilizations that became addicted to these technologies. "We must learn to re-awaken and keep ourselves awake, not by mechanical aids, but by an infinite expectation" (Thoreau, p. 8). He wanted them to quit using one of the factory bells to wake up in the morning. (Alam, 100, paper 1)

We will face tremendous challenge to reserve the amount of water for our generation in the future. Secondly, desertification has become the most common phenomenon in the Arab region. The closest definition of desertification is, as the author says, "land degradation in arid, semi-arid, and dry sub-humid areas resulting from various factors including climatic variations and human activities" (p. 40). In my opinion, based on my reading, I think the main causes of desertification in Qatar has resulted from excess in pumping groundwater, over-grazing and lack of fertilizer. These factors have reduced the importance of most lands

⁶ The DocuScope system differentiates between positive values and negative values. However, for the current analysis, we have collapsed these two variables because polarity was related to the topic being described and whether the student writer supported it or disagreed with it, and because our focus here is students' "evaluation of behavior and phenomena based on institutional norms" (Christie & Derewianka 2008: 15), rather than polarity.

when it became desert. If we scrutinize, we will find that mankind formed these harmful results. (Alam, 100, paper 2)

In the excerpt from paper 1, the student uses few abstract nouns, instead using mostly concrete nouns to discuss tangible items, and interpreting the quote from Thoreau in a literal, concrete way. In the excerpt from paper 2, however, the student uses abstract nouns to discuss abstract, intangible concepts (e.g., “challenge”, “phenomenon”, “mankind”, “results”) and to characterize concrete concepts in abstract ways (e.g., “common phenomenon”, “these factors”).

After the second paper in English 100, however, the proportion of language indicating Abstract Thought stayed fairly constant, except for a significant increase in the first paper of the second-semester course, English 101. This increase may have been due to the topic of this assignment, which was to analyze the argument of a rhetorical critique. This topic resulted in inclusion of many nouns from the source text which were categorized as abstract concepts. For example:

In this paper he argues that Watson and Crick’s paper established an ethos which contributed to the significance of the DNA model and that rhetoric is extremely significant in providing a scientific discourse. (Najwan, 101, paper 1)

Citing of other authors, also a part of the Academic Register cluster, stayed at nearly the same levels in most of the assignments in the first semester, except for a significant decrease in the second paper. This decrease seems to be due to the nature of the writing task of paper 2, which was a reaction to an author’s argument. This is in contrast to the other papers, in which the task was to either describe an author’s argument (paper 1) or to compare and contrast multiple authors’ viewpoints (papers 3 and 4). For example:

Brown also proposes some solutions on how to become more sustainable. In my opinion the rising world population, over-use of the water, and more falling states lead to the water shortage all around the globe. Furthermore, all of these problems are linked. The issue with water is very serious. As I stated before, the water has been one of the main sources of life. (Osama, 100, paper 2)

Brown suggests that soon we will run out of resources and we will have big problems. He finds the solution in recycling the products. In his opinion, recycling is the only way to get the resources back and stop the expanding landfills. Cradle to Cradle, on the other hand, very shockingly criticizes the recycling process. First of all, the authors try to point out that the amount of energy, power, and time wasted on recycling causes more damage to the environment than creating a new product. (Osama, 100, paper 4)

In paper 2, the student initially cites Brown, but then presents his own opinion. In paper 4, however, the student cites Brown, then cites other authors, and shows that the two authors have differing opinions about recycling.

Furthermore, Citing Others was the highest at the start of the second semester, after which it decreased significantly. This unexpected decrease seems to, again, be due to the demands of the specific writing tasks. In the second semester, the first paper involved an analysis of an author's argument, and thus included more reference to that author's work, such as the following:

The author affirms the success of Watson and Crick's argument and explains how the use of rhetoric in *their paper* supported the fact of what they were presenting, giving it "supreme confidence" (p. 75), poise, and trusted quality, even though the paper is understated. The *claim* of the discovery as their own gave *their paper* a more powerful and appealing shape that would have an immense result on the readers. Their use of rhetoric, especially ethos, diverted the way Watson and Crick went around their argument; with *their findings*, they did not only *explicate* biology, they also changed the way ideas are tracked and practiced. (Selma, 101, paper 1)

After this paper, however, the assignments began requiring students to include more of their own interpretation and opinion, with the final paper being a paper in which students contribute their own perspective on an issue. In such a paper, it would be expected that students offer their own viewpoint in addition to discussing others' opinions, such as in the following:

Andrews *claims* that the previous reasons are enough to drive the child insane and create both psychological and social damage that will affect the life of the clone, which goes back to the *claim* that clones will encounter social and psychological problems due to being a clone. Hearing the opinions of different sides, I conclude my judgment that being a clone in the future won't promote either social or psychological problems to clones, it won't label them as outcasts from the society they live in nor will it cause severe mental damage that will result in harm beyond repair. (Selma, 101, paper 3)

Here, the student begins by citing an author, but then offers her own opinion in relation to the cited author's. As a result, the overall proportion of reference to other authors' works is lower.

Metadiscourse, or language that guides the reader through the text, is also part of the Academic Register cluster, and generally increased over the two semesters. For example, in papers at the beginning of the first semester, students tended not to explain logical relationships between ideas, such as in the following:

Seeking for simplicity, Thoreau journeys to the forest to pursue a life with no attachments. He wanted to live a life with only the essentials and nothing more. "A man is rich in pro-

portion to the number of things which he can afford to let alone.” Thoreau enjoys being isolated. (Abu, 100, paper 1)

Here, the student does not use language that explicitly indicates logical relationships between sentences. For example, the first sentence in the example is further explained in the second sentence, a relationship which could have been indicated using a phrase such as “that is”. In later papers, however, students began including more metadiscourse markers to guide readers through the text by indicating logical relationships:

Moreover, Halloran states another crucial method Watson and Crick established in their paper, besides the styles mentioned above, which is ethos. (Abu, 101, paper 1)

In this example, “moreover”, “another”, “besides” and “mentioned above” show the reader that the idea being introduced is related to, but different from, the previous idea. Metadiscourse markers such as these guide the reader’s understanding of the text. In this way, we can see that the students seem to become more aware of their audience’s understanding of the text.

Use of language in the Reasoning cluster also increased throughout the two semesters. This cluster consists of three different types of reasoning: Constructive, Contingency, and Oppositional. Increases in Contingency Reasoning and Oppositional Reasoning were especially noticeable from the beginning of the year to the end, with a smaller increase seen in Constructive Reasoning. Constructive Reasoning is reasoning that gives support or evidence for a reasoning process, such as in the following:

This sense of danger to human individuality comes from the assumption that human genes play a vital role in the development, both emotional and physiological, of the human and since human cloning is the primary factor in gene replication, it should not be encouraged. (Fadel, 101, paper 3)

Contingency Reasoning is reasoning that indicates that an idea is dependent upon something else, such as in the following:

He feels that clones will be declined of these rights once humans will be cloned in large numbers. This will happen if clones are created in large numbers, and it would give it an impression of a commodity or a slave. (Madhav, 101, paper 2)

Oppositional Reasoning is reasoning involving ideas with which the writer does not agree, and is reflected in language that shows denial, concession, or resistance to the opposing idea, such as in the following:

The technology and procedures behind this process have been advanced, consequently forcing the implementation of various, strict policies, but to what extent should these policies be enforced? (Serena, 101, paper 2)

These are in contrast to students' writing at the beginning of the first semester, which lacked explicit reasoning, such as in the following:

Water shortage is a very serious issue which is about to happen in Qatar if it reached to a high level. Human beings should keep in their consideration this issue and try to prevent it from happening. The issue of water shortage is world-wide. There are different levels of water shortages within the globe, some regions have higher level of water shortages and some have lower. (Fadel, 100, paper 2)

In this example, the student makes a series of claims, but does not elaborate the thought process or reasoning that connects those claims. The overall increase in language that elaborates reasoning may show an increasing awareness of audience. Similar to metadiscourse, by making relationships between ideas clearer, language that indicates reasoning makes the author's thought processes explicit for the reader.

The Elaboration cluster also shows elaboration of ideas, but does so through the dimensions of Definition, Exemplification, Generalization, and Specification. Students' use of definition, examples, and specification generally increased over the year, whereas generalization decreased. An instance of elaboration using definition can be seen in the following:

Effectiveness, according to the authors, is defined as inventing new products that directly contribute in saving the environment and save its resources." (Dima, 100, paper 4)

Here, the student elaborates an idea by giving a definition of a term according to the authors of the source text. Elaboration through exemplification can be seen in the following:

Discrimination even exists in airports, as when an Arab applies for a visa one of the questions asked is "are you a terrorist?" (Ayub, 101, paper 3)

Here, the student uses the phrase "as when", to set off an elaboration of an idea (discrimination) by use of a specific example (an Arab applying for a visa). Use of language in the Specifying dimension can be seen in the following:

Kass and others argue that identity is determined by, and limited to, genetic uniqueness. In other words, they claim that a person is differentiated from another if and only if he didn't have identical gene combinations with anyone else. Their main assumption is that the re-

sponsible factor for distinguishing humans, so that each one carries a unique identity, is only the unique genetic combination each person has. (Masooma, 101, paper 3)

In this example, the student uses language to elaborate their ideas by making them more specific. For example, she uses the phrase “in other words” to show that she is explaining Kass’s argument in more specific terms. In addition, the student points out that the assumption is the main assumption that the authors make, again making the elaboration more specific.

Interestingly, although increases are seen in the Exemplification, Definition, and Specification dimensions, the Generalization dimension decreased over the two semesters. Generalization can be seen in the following:

Media, all its types, reach to almost all society members each according to his preference. (Masooma, 100, paper 2)

Although it was expected that Generalization would increase as students learned to synthesize information in their writing, it appears that much of what was classified as Generalization was language that made more broad generalizations such as “all of the problems today” (Kyle, 100, paper 1) or “everyone in the world should” (Dima, 100, paper 2); such absolute language is generally not a feature of academic writing, and, thus, a decrease may come as a result of techniques to make writing less absolute, such as hedging.

The Reporting cluster also increased over the course of the year. This cluster includes verbs that report changes, events, processes, and states, such as in the following:

Because both genes and external environmental factors have their own effects (Process), one building another’s special characteristics, we could definitely argue that the two halves are genetic and environmental factors. In other words, both genes and environmental factors strengthen (Change) the overall structure for identity. The structure of identity is built (State) from the unique combination of these two interacting (Event) elements. (Masoomah, 101, paper 3)

Verbs of these types are typically found in expository writing (Kaufer et al. 2004), and are contrasted in the DocuScope system with narrative verbs, which are used to tell a story rather than to report.

In addition to the variables described above, variables in two Clusters (Description and Narrative) were hypothesized to decrease with academic writing development. These are shown in Table 2.

Table 2: Variables hypothesized to decrease with academic writing development

[Cluster]/Dimension	English 100				English 101		
	1	2	3	4	1	2	3
[Description]							
Sensory Language	28.27	54.16*	13.62†	42.06*	10.22†	15.65*	16.67
[Narrative]							
Narrative Verbs	1.56	0.80†	0.70	0.56	2.19*	0.69†	0.72
Narrative Background	1.26	1.29	0.87	1.21	1.60	0.86†	1.26
Time Expressions	14.05	8.68†	5.58†	6.37	4.85†	6.03	6.94

Note: [] refer to clusters. Variables listed under each cluster are dimensions within that cluster.
 * = Significant increase compared to previous paper ($p < .05$)
 † = Significant decrease compared to previous paper ($p < .05$)

The Description⁷ cluster includes Sensory Language, which is language that appeals to the senses, and describes concrete scenes and objects with lively and colorful properties:

Thriving economies such as India's and China's which are heavily thirsty for oil reinforces this belief. (Bobby, 100, paper 2)

Descriptive, sensory language describes a more subjective experience from an individual's point of view. Over time, however, students use less sensory language, such as in the following:

Cloning technology threatens the social and reproductive aspects that make a society, hence cloning technology harms the society morally and physically. The implications of cloning for family and social relationships remain uncharted. (Bobby, 101, paper 3)

⁷ The other dimension within the Description cluster is Space Movement, which describes physical movement within or across spaces. This variable is not included in the analysis because the definition of this variable indicates that it is more closely related to everyday, congruent description rather than the discussion of issues. While Kaufer et al. (2004) state that Space Movement is typical of fiction writing and storytelling, we found that use in our expository text samples was related to the topic being discussed (e.g., "He argued that rising sea levels will cause water stress and hunger"; Dania, 100, paper 3), and was not related to the students' ability to explicate, analyze, and respond to texts.

Sensory language can be contrasted with the language used in the Academic Register cluster to describe intangible, abstract concepts, and the registers and values of publications and institutions found in the Institutional Register cluster, which present opinions and experiences more objectively.

The Narrative cluster also saw decreases, with changes occurring in the Narrative Verbs, Biographical Time, and Time Date dimensions. Narrative Verbs includes verbs that support narrative, such as those that indicate actions in a story. For example:

Halloran started his essay by explaining the point of his essay and what he wants to show throughout the essay, which is how ethos is shown in the work of Watson and Crick. (Tamara, 101, paper 1)

This is in contrast with verbs that are not narrative in nature (most of which were categorized in the Reporting cluster), such as those in the following:

According to author Leon R. Kass and the National Bioethics Advisory Commission (NBAC), the clone will undergo serious psychological problems because of their relationship with the donor, and also faces individuality and personal autonomy loss challenges because of their comparison with the donor all the time. (Tamara, 101, paper 3)

Overall, however, use of narrative verbs was low over the two courses. The exception to this was in the first paper of each course, which was possibly an effect of the writing task; the first assignment in each course was a summary or analysis of an author's argument. This type of task seems to have resulted in high use of narrative verbs to describe how an author constructs his or her argument, as in the above example from English 101, paper 1.

Decreases were also seen in the Time Expressions dimension. This mainly includes words that indicate intervals of time in order to create a rhetorical experience of framing a context for narrative, such as temporal intervals. For example:

The emerging water shortages over the years are an extremely serious issue and which should be given more attention. We have dug ourselves a hole that's getting deeper over every passing year. (Abu, 100, paper 2)

Decreases in the amount of Time Expressions were seen mostly in the first half of the first semester. As narrative is not typically a feature of academic writing, overall decreases in the variables within this cluster can be seen as development of academic writing skills.

Overall, the analysis using the DocuScope tool found increases in language: 1) to refer to institutions and publications, 2) to refer to abstract concepts and to guide readers through a text, 3) to show reasoning and logical connections be-

tween ideas, 4) to elaborate by giving examples, defining, and specifying, and 5) to report on events or processes. In addition, decreases were found in language: 1) to describe, especially using sensory language and 2) to show actions and events in narrative, especially through use of language showing time duration. However, it is important to also note that although there were changes from the beginning of the year to the end, many of these changes did not occur in a linear fashion. Rather, there were both increases and decreases over the course of the year, showing the complex nature of academic writing development.

6 Conclusion

Given the complexities of literacy and writing development, these findings shed light on the various trajectories that students make in their transition to an English-medium college, their struggles, and their development as they engaged with the various writing tasks they were required to write. Given the non-linear nature of writing development and the fact that development is not always visible on paper as seen in the analysis of student writing (Sommers 2008; Stern-glass 1997), the interview data are pivotal in revealing the progress students made in their first year as college students. Students became more self-aware of their strengths and weaknesses in their reading and writing skills as well as in their conduct as college students, in addition to better understanding of linguistic features of American English academic writing, different writing expectations across the curriculum, importance of purpose and audience in writing, and strategies and resources they need to draw on in order to succeed academically.

For this institution, others in Qatar, and other English-medium universities in EFL settings, learning about student challenges in their transition to college and their use (or lack of use) of strategies and resources can help administrators and faculty make informed decisions about how to best support student learning and academic development. For example, it was not until the second semester that students understood the benefits of going to a professor's office hours and using this important resource for their own benefit. Making this explicit to students from freshman orientation and reiterating it throughout the first weeks of the semester can certainly contribute to students' earlier progress in their academic lives.

The students' perceived achievements and development parallel the trends of progress toward more academic writing observed in the analysis of their writing. However, on paper, this development is not always perfectly linear. Although the text analysis shows that over the course of a year, students' writing became more academic-like with increasing use of institutional and academic register,

elaboration, and reasoning, leaving behind more descriptive, narrative, informal, and oral-like ways of communicating, this development was not always linear, and progress from one paper to another was not always upward. This is because of the non-linear nature of writing development in which development happens over time. Progress is not always visible on the page, and it is difficult to measure as students are constantly introduced to new genres (Sommers 2008; Sternglass 1997). Writing development is also influenced by personal and intellectual interest, motivation, effort, writing instruction and constructive feedback, and writing outside of school (Carroll 2002; Curtis & Herrington 2003). Thus, decreases in the use of certain linguistic features of academic language in student writing may be a result of the time in the semester when the task was assigned (e.g., students may perform lower in their writing assignments at the end of the semester, overwhelmed by the demands of final exams and projects), student motivation, or lack of effort, rather than developmental stages of writing skills. The progress made by students in their writing can be attributed to personal and intellectual growth, as revealed in the student interviews. As students became more mindful about the strategies and resources they needed to use to succeed, and as they came to better understand expectations of academic writing, better outcomes appeared in their writing.

Faculty across the curriculum need to be aware of the complexities of writing and the linguistic and rhetorical demands of their writing assignments to assist academic writing development in their course and assignment objectives, guidelines, and practices. As part of the larger study, we are currently making an on-going effort to share the findings from the DocuScope analysis with teachers, in particular findings related to the comparison of high- and low-graded written assignments. The aim is to help teachers to have better understanding of the rhetorical and linguistic demands of their assignments to improve their teaching at CMU-Q.

As an English-medium university in Qatar committed to meeting Qatar's educational and human capital development goals, CMU-Q seems to be making progress toward developing students' communication skills in English. The emphasis on writing in the first year through English 100 and 101 and a reading and writing-intensive history course seem to be contributing to students' literacy development in English. However, challenges remain, as found in this study. Recognition of those challenges reported by students and a better understanding and articulation of expectations and objectives could assist students' smooth transition to college in the first year and beyond. More careful and systematic documentation of students' academic development across courses, semesters, and years, and transfer and application of skills learned in one course to other courses is necessary. This is the focus of the larger study from which the present study is drawn.

The immense body of data will be of great importance in evaluating outcomes of the huge investment in English-medium education in Qatar. In turn, lessons learned from this educational and human development experiment can inform teaching, learning, and researching in other English-medium universities in EFL settings around the world.

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Appendix 1: Demographic information for interview participants

Name	Gender	Nationality	L1	Major	HS medium of instruction
Alia	F	Qatar	Arabic	BA	Arabic & English
Amaar	M	Pakistan	Urdu & English	CS	English
Dima	F	Palestine	Arabic	BA	Arabic
Faheem	M	Jordan	Arabic	IS	English
Farida	F	Qatar	Arabic	BA	Arabic & English
Faroooha	F	Bahrain	Arabic	BA/IS	Arabic & English
Farwa	F	Qatar	Arabic	BA	English
Habib	M	Qatar	Arabic	BA	Arabic & English
Habiba	F	Qatar	Arabic	IS	Arabic & English
Hira	F	Bangladesh	Bengali	IS	English
Karida	F	USA	Arabic & English	BA	English
Lamya	F	Egypt	Arabic	BA	Arabic
Leila	F	Qatar	Arabic	BA	Arabic & English
Maira	F	Qatar	Arabic	BA	English
Malik	M	Syria	Arabic	BA	Arabic
Maria	F	India	Bengali & English	BA	English
Marko	M	India	Telugu & English	CS	English
Maysa	F	Qatar	Arabic	BA	English
Najwan	F	Qatar	Arabic	IS	Arabic & English
Osama	M	Azerbaijan	Azerbaijani	BA	English
Rana	F	Jordan	Arabic	IS	Arabic & English
Serena	F	India	Hindi & English	CS	English
Tahir	M	Qatar	Arabic	CS	Arabic & English
Tamam	M	Iraq	Arabic	BA	Arabic

Note: BA = Business Administration, CS = Computer Science, IS = Information Systems, HS = high school

Appendix 2: Initial interview protocol

1. How is the semester going? What classes are you taking? How are you performing in your classes this semester? To what extent are you satisfied with your mid-semester grades?
2. To what extent do you think your reading and writing abilities have an impact on your performance in your classes?
3. What are the reading requirements and expectations in your classes? To what extent do professors expect you to the readings and to what extent do they check that you did the assigned readings? For example, are you required to post comments on blackboard based on the readings before class? Are you required to write a response to the reading? To what extent are the readings easy/difficult/overwhelming/challenging/interesting/boring/time consuming to you?
4. How are you approaching your reading assignments? How are you coping with the amount of reading in your classes? What do you do first, second, last? Were you taught any reading strategies in school? If so, what are they? Do you use any strategies to help you read more effectively? If so, what strategies do you use? What challenges do you face? To what extent have you kept up with the reading material in your classes?
5. What has been most challenging about completing your reading assignments this semester?
6. What are the writing requirements and expectations in your classes? How much writing is required in your classes and what kinds of texts do you write? To what extent are the readings easy/difficult/overwhelming/challenging/interesting/boring/time consuming to you?
7. How do you usually approach a writing assignment? What do you do first, second, last? How are you coping with the amount of writing in your classes?
8. What grades have you received in your writing assignments this semester thus far? How satisfied are you with these grades? How do these grades reflect your writing abilities? What could you have done to receive better grades?
9. What kinds of instruction, preparation, and/or feedback are your instructors providing for completing the writing assignments successfully? How helpful have these been? What have you learned about academic writing thus far? Have you engaged in multiple-draft writing? To what extent have you received feedback from your professors in your writing? What did the feedback focus on? How helpful has the feedback been? Have your professors provided you with models of assignments to help you understand the assignment? Have your professors used a rubric to evaluate your writing?

10. What has helped you the most with your writing thus far? What could your instructors do to improve their instruction in terms of writing?
11. Have you sought help from your professors, the TA/CAs, and the ARC for your reading and writing assignments? How were those experiences? How helpful were they?
12. Describe the last text you wrote in English for school purposes. What kind of text was it? How long did it take you to write it? How did you approach the task? Did you enjoy writing it? Why or why not? Did you encounter any problems accomplishing this writing? If so, what problems did you encounter? What grade did you receive in it?
13. Describe one of the major writing assignments for this semester. How are you tackling this assignment? Have you started working on it? What do you think will be easy/difficult about it?
14. What has been most challenging to you when completing your writing assignments this semester?
15. What do you think is the role of writing in college? Why do professors ask you to write papers? To what extent does writing help you to learn the content from your classes?
16. How would you define good academic writing? How does “A” writing look like for you?
17. Where have you been completing your reading and writing assignments this semester? At home? At school? How easy/difficult has it been for you to complete your school work at home or at school?
18. Have you done any writing outside of school? If so, what?
19. Are you working this semester? If so, where and how many hours a week are you working? Is there any reading and writing involved in your work? If so, describe it.
20. Are you involved in any student affairs activities this semester? If so, what activities? Is there any reading and writing involved in any of those activities? If so, what are they?
21. Do you have any specific goals for improving your reading and writing from now on until the end of the semester? If so, what are they and how do you plan to accomplish them?
22. Is there anything else you would like to share about your reading and writing experiences thus far?