

RUNNING HEAD: FACULTY PERSPECTIVES OF INTERNATIONAL STUDENTS

AN EXPLORATORY STUDY OF FACULTY PERSPECTIVES OF THE CHALLENGES
AND SUCCESSES OF UNDERGRADUATE INTERNATIONAL STUDENTS WHO ARE
LEARNERS OF ENGLISH AS A FOREIGN LANGUAGE

by

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An Exploratory Study of Faculty Perspectives of the Challenges and Successes of Undergraduate International Students who are Learners of English as a Foreign Language

Thesis directed by Assistant Professor Lucinda Soltero-Gonzalez

This paper reports on an exploratory research study conducted about faculty perspectives of the struggles international students who are learners of English as a foreign language encounter at a U.S. university and the factors leading to their success. Semi-structured interviews with faculty and advisors revealed linguistic, cultural, academic, social, and personal struggles. Factors of success identified mirrored student struggles. Faculty and advisors also reported on recommendations for additional support services for students and institutional changes that should be made.

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Introduction

Statement of the Problem

In his 1966 article, Richard Dremuk (McLean, Cilliers, & Van Wyk, 2008) labeled the admission of international students to U.S. universities as the “irksome problem” fit only for “some lowly assistant” (p. 5). Over the last fifty years, this sentiment found in many universities has completely altered. International students are no longer seen as an “irksome problem.” Instead, international students are a highly sought after demographic. Universities have created entire departments dedicated to the care of international students, and diversity is greatly encouraged and even required. After the decimation of Europe’s educational system during World War II, the number of international students has grown exponentially in the United States. In 1948/1949, The Institute of International Education (2013) reported 25, 464 international students in the United States; as of the 2011/2012 school year, that number had grown to 764,495.

Despite the positive attitudes of universities toward the admission of international students and the increasing numbers of services available to aid international students with their adjustment to the U.S. university system, great numbers of international students still report facing significant challenges during the course of their time at university. A great corpus of research exists describing such challenges. In their book *International Students: Strengthening a Critical Resource*, leading scholars on international students in U.S. higher education, Andrade and Evans (2009), synthesize this literature and suggest that the issues faced by international students can be divided into three “at-risk factors:” academic, social, and personal (p. 137) rooted in linguistic and cultural challenges. Specific challenges can include language barriers, classroom cultural differences, a lack of understanding of U.S. culture, and isolation.

While a great deal of research has been conducted outlining international student adjustment issues and subsequent services and solutions offered as a result to support these students, most research has stemmed from surveys, case studies, and interviews of international students themselves. However, a significant yet largely unstudied factor influencing the success of these students can also be traced back to a school's administration and faculty. Scant research exists describing their perceptions of the unique academic, social, and personal adjustment issues international students encounter.

Purpose Statement

The purpose of this study is to explore the perspectives of U.S. university faculty members about the unique struggles facing undergraduate international students and the factors leading to their success. Expected struggles include linguistic, academic, cultural, social, and personal struggles. After the identification of these struggles, the goal of the study is to suggest potential implications for the university's language training institute, university professors, international student support services, and university policy in order to help international students become fully functioning and well-adjusted members of the university community academically, socially, and personally.

Conceptual Framework

Different labels have been given to identify a student studying at a U.S. university who is from a country outside of the U.S. and whose first language is not English. Researchers in the field of higher education have chosen to label such students by a variety of terms including *international students*, *foreign students*, *second language learners*, *L2 speakers*, and *non-native English speakers (NNES)* to name a few. While all have been used interchangeably within the literature, it is important to provide a working definition of what is meant in this study when

using the terminology given above. This paper will label these students as international students and follow the definition provided by Andrade (2006). “The terms ... are used interchangeably to refer to NNEs temporarily in the United States for educational purposes ...” (p. 220). As Andrade points out, it is important to note that the terms international students and foreign students can also refer to native speakers of English; however, for the purposes of this thesis, it will solely refer to non-native speakers of English who have learned English as a foreign language (EFL).

Every university freshman encounters new situations, pressures, and adjustment factors. Undergraduate international students encounter these challenges plus a multitude of other linguistic and cultural challenges often due to a mismatch between a student’s home culture and the target culture. I examine these adjustment factors through two main theoretical lenses: 1) Lev Vygotsky’s Sociocultural Theory (1978) and Lave and Wenger’s theory on “communities of practice” (1991), and 2) dimensions affecting the second language young adult learner: social and cultural, linguistic, cognitive, and academic (Herrera, Pérez, & Escamilla, 2010; Thomas & Collier, 1997; Brown, 2007; Lightbown & Spada, 2006; Valdés, 1992).

Sociocultural theory and communities of practice. The premise underlying Vygotsky’s Sociocultural Theory is that social interaction is the primary driving force behind human development (Eun, 2010); Vygotsky (1978) held that learning moves from a social sphere to an individual sphere. Engeström and Miettinen (1999) added to Vygotsky’s idea by suggesting, “Individuals act in collective practices, communities, and institutions.” (p. 11). In other words, students do not learn in isolation.

Kim (2011) provides a critical link between Vygotsky’s work and the work of Jean Lave and Etienne Wenger. Kim points out the importance Vygotsky placed on understanding the

sociocultural environment in which learning takes place as being very closely connected with Lave and Wenger's (1991) theory on "communities of practice" which posits that, "Learners inevitably participate in communities of practitioners and that the master of knowledge and skill requires newcomers to move toward full participation in the sociocultural practices of a community" (p. 29). True learning takes place when members of a learning community become full participants within that community.

Kim (2011) suggests that the struggles faced by international graduate students within the U.S. university classrooms link closely back to and can be interpreted by their challenge to fit into an unfamiliar cultural, linguistic, and social situation – the U.S. university classroom. This inability to fully share in this interactive learning community leads to the struggles international students face.

What Kim fails to do, however, is to actually define this community of practice. In other words, in order to identify the problems international students face, it is important to actually understand the nature of the U.S. higher education classroom and what makes it distinct from other higher educational institutions around the world. Before beginning this discussion, however, it is vital to note that while the culture found in many U.S. higher educational institutions has certain defining characteristics, it is by no means a homogenous system. Details of culture and practice can vary greatly from institution to institution. With that being said, however, there are certain common traits that can be defined.

A recent NAFSA publication (Smithee, Greenblatt, & Elan, 2004) outlined the values that comprise the "important cornerstones of U.S. classroom learning environment" as the following:

- The rights of the individual

- Personal responsibility
- Freedom of choice
- Freedom of speech
- Interactive Learning
- Liberal education
- Independent thinking
- Democratic principles
- Fairness
- Diversity
- Equality (p. 11).

These values tend to manifest themselves in practice in the more learner-centered classroom found in the U.S. rather than the more teacher-centered classroom found in other parts of the world. Learner-focused classrooms tend to employ a variety of different pedagogical strategies than their teacher-centered counterparts. These differences often found within U.S. higher education classrooms can be broken down into the following categories: instructional methods, teacher student relationships, the role of the instructor, and the role of the student (Cimasko, Paiz, & Gherwash, 2013; Eberly Center for Teaching Excellence, n.d.; Smithee et al., 2004).

Many international students are used to an instructor disseminating information for them to memorize. Often the teacher is held in an unapproachable, unquestionable light. However, in a learner-centered classroom, the role of the professor is not just to share information, but rather it is to guide students and to facilitate discussion. It is his or her role to guide the students through a

variety of different activities (Cimasko et al., 2013; Eberly Center for Teaching Excellence, n.d.; Smithee et al., 2004).

International students are often unaccustomed to the different relationship between professors and students caused by this switch in the role of the instructor. U.S. classrooms often employ a Socratic model in which there is a mutual sharing of knowledge between the professors and their students. Teachers evaluate students, but students also evaluate their instructors and their classmates. Teacher/student relationships, while professional, are also much more informal than many international students have experienced (Cimasko et al., 2013; Eberly Center for Teaching Excellence, n.d.; Smithee et al., 2004).

In traditional teacher-centered classrooms, the role of the student is to listen, take notes, memorize, and regurgitate the memorized information. However, a learner-centered classroom often found in the U.S. values collaboration and participation. Students are expected to think critically, to share their well-supported opinions, to ask questions, and even to disagree with the professor. In this U.S. system, direct, specific, and clear oral and written communication is expected. Students are expected to understand the lines of collaboration versus plagiarism and cheating (Cimasko et al., 2013; Eberly Center for Teaching Excellence, n.d.; Smithee et al., 2004).

In a teacher-centered classroom, student activities tend to revolve around oral and written final exams; many international students come from backgrounds where all their grades rest on a final exam. U.S. university classrooms rely not only on the final exam grade but also on participation, writing assignments, presentations, group work, and other types of activities (Cimasko et al., 2013; Eberly Center for Teaching Excellence, n.d.; Smithee et al., 2004).

It is within this learner-centered classroom that the international students must learn to navigate new academic, social, and personal expectations. They must try to figure out how to become members of a new community with its own set of rules and practices.

Dimensions affecting the learner of English as a foreign language. Having conceptualized the “community of practices” of the U.S. university classroom, it is important to now identify the characteristics uniquely affecting international students who are learners of English as a foreign language within this community of practices. It is often easy to assume that the only factor affecting them is language itself; however, this is far from the actual reality.

Thomas and Collier (1997) advanced that the English language learner is a complex entity affected not only by linguistic processes but also by academic, social, cultural, and cognitive processes. Thomas and Collier conceptualized the second language learner based on the Prism Model provided in Figure 1. In this model, the linguistic, academic, cognitive, social, and cultural processes are all contributing factors to a learner’s ability to succeed in the classroom. The English language learner originally written about by Thomas and Collier was a child growing up in the United States learning English in order to attend public school. Valdés (1992) identifies this type of learner as a “circumstantial bilingual.” Circumstantial bilinguals learn English for “survival purposes” in order to “fill communicative needs” and “participate economically and politically in society” (p. 94). In order to succeed in the U.S. public education system, circumstantial bilinguals must learn English. However, international students entering U.S. universities would be classified as “elective bilinguals” according to Valdés’ description. In other words, they have chosen to become bilingual; however, bilingualism may not be critical for their economic and political participation in their home country. International students have chosen to become bilingual to pursue higher education in the United States.

While the profile of language learners described by Thomas and Collier is different than that of international students, the dimensions affecting them are similar. I have adapted the dimensions from the Prism Model to better reflect the characteristics of the learners of EFL. I will describe the dimensions affecting international students based on the model laid out by Thomas and Collier.

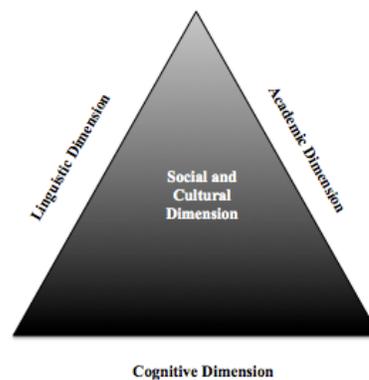


Figure 1. Prism model (Thomas and Collier, 1997).

Social and cultural dimensions. At the center of the model are the social and cultural processes facing international students. According to Herrera, Perez, and Escamilla (2010), these factors are the “love, laughter, and life” of the students (p. 21). International students are personally influenced by a variety of affective factors, personality, and cultural factors (Thomas & Collier, 1997). Affective and personality factors affecting students include the following: intrinsic vs. extrinsic motivation, self-esteem, self-efficacy, willingness to communicate, inhibition, risk-taking, anxiety levels, empathy, and extroversion. Cultural aspects influencing students incorporate perspectives on assimilation and acculturation, culture shock, and actual vs. perceived social similarity/dissimilarity between the host culture and student’s culture (Brown, 2007; Gass & Selinker, 2001; Lightbown & Spada, 2006; Odlin, 1989).

Cognitive dimensions. Linking the affective dimension (and subsequently sociocultural dimension) of second language learners to the cognitive dimension, Brown (2007) said, “No successful cognitive activity can be carried out without some degree of self-esteem, self-confidence, knowledge of yourself, and self-efficacy” (p. 154). According to Herrera et al. (2010), the cognitive dimension requires students to “know, think, and apply” (p. 21).

Academic dimensions. Cognitive development and academic development are closely connected; as students develop cognitively, the depth and expanse of their academic work develops simultaneously. The majority of undergraduate international students have reached adulthood; thus, they have expansive “academic knowledge and conceptual development” to transfer from their first language to their second language (Thomas & Collier, 1997).

Linguistic dimensions. The final dimension affecting students is the linguistic or language domain through which students comprehend, communicate, and express themselves in both their first and second language (Herrera et al., 2010). The majority of undergraduate international students are sequential bilinguals and learners of EFL; thus, they likely developed their second language competencies in a formal language setting in their home country for the purposes of academic success and the gaining of knowledge (Baker, 2006). These students experience language transfer between their first and second language. According to Odlin (1989), this topic is heavily debated as to the exact nature of how the transfer occurs; however, the reality based on the majority of studies is that while its exact nature is not known, it does indeed occur. Originally, many researchers believed that transfer was simply negative transfer from a speaker’s first language into their target language; however, the reality is that students can experience both positive and negative transfer. This transfer happens both productively and receptively. Cross-linguistic transfer occurs on the discourse, semantic, syntactic, and phonetic

level. Examples of positive transfer can include benefiting from comparable discourse patterns, semantic similarities, and parallel syntactic construction (Herrera et al., 2010). However, students can also experience disconnect between their first language and the target language. These disconnects lead to both oral and written miscommunications and negative perceptions.

The figure diagrammed below illustrates the complex interaction between the theories described above. The international student who is a learner of EFL is a student affected by four complex dimensions: linguistic, academic, cognitive, and social/cultural. This learner is striving to fully participate in a community of practice that is the U.S. classroom.

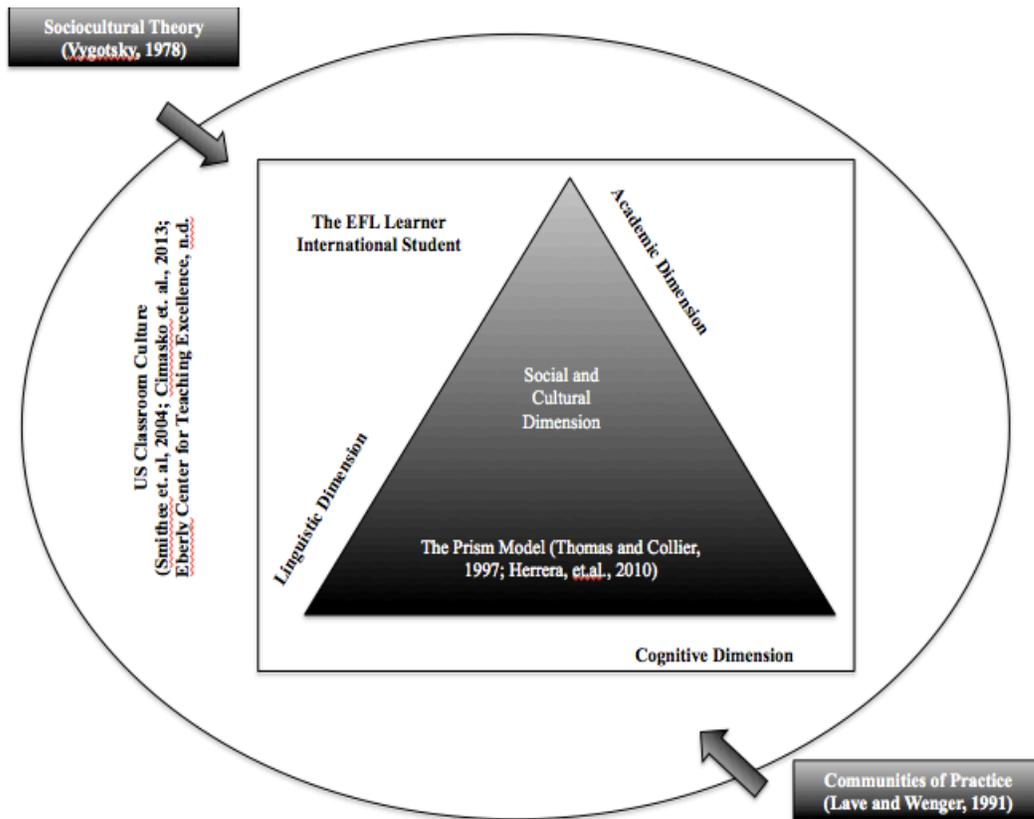


Figure 2. Conceptual framework of the interplay of theories.

Research Questions

The following research questions guided this study:

1. What are the faculty perspectives of the challenges undergraduate international students at a U.S. university face and the factors leading to their success?
2. What improvements should be made to the university's international student support system to best help international student succeed at the university?

Study Significance

Extensive research on the adjustment factors of international students has been conducted from the perspective of international students; however, a very limited body of research exists detailing the perspectives of university administration, faculty, and advisors about non-native English speakers in an English-medium classroom. The majority of the data has been collected through surveys, interviews, and case studies. Little to no other data sources have been utilized in the gathering of information. Research samples have been quite small in number-averaging no more than 100 participants across a maximum of four different institutions. While some information has been collected on the varying perceptions of professors across disciplines, it has been in no way comprehensive; the majority of this research has been about graduate rather than undergraduate students. Identifying these adjustment factors and challenges is critical for departments serving both faculty and international students. By identifying these factors, international student departments will be able to better offer classes, services, and orientation which will better equip international students to meet the demands of a new educational system and the demands of their professors.

Literature Review

I will now provide a summary of the background research on the struggles of international undergraduate students from the perspective of faculty and advisors as well as solutions that have been offered to meet the challenges.

Struggles from the Perspective of Faculty and Advisors

For graduate and undergraduate students alike, the underlying academic, social, and personal challenges facing all international students can be linked back primarily to language and cultural difficulties (Gürel, 2011; Trice, 2005).

In studies seeking to identify the most common writing problems of graduate students, weak language skills are the most cited problem (Casanave & Hubbard, 1992). Similarly, in studies addressing the oral proficiency of students, the most cited difficulty is again linked back to language skills. More specifically, graduate students' lack of an adequate academic vocabulary and oral and written mechanical issues pose a great challenge for professors (Jenkins, 2000).

The second most cited writing challenge is a lack of understanding of the typical rhetorical structures utilized in English. Casanave and Hubbard (1992), for example, suggest that in the writing of doctoral students these global writing issues of rhetorical style are more problematic than mechanical issues such as a lack of vocabulary and spelling particularly. The faculty in the social sciences and humanities departments rather than science and technological fields have especially noted this. According to Dong (1998), these graduate students struggle with genre-specific writing and the identification of an audience in their writing.

Students' lack of language ability causes not only writing but also communication problems as well. International students are often hesitant to participate in class and group discussions, to share their opinions, and to ask questions. International students tend to be less

versed at disciplinary-specific dialogue. This results in a lack of student success in a university system so driven by class discussion, the mutual sharing of knowledge, questioning, and argumentation (Robertson, Line, Jones, & Thomas, 2000).

Researchers in mathematics and sciences note that international students' mathematical skills (Jenkins, 2000) and research sophistication (Barber & Morgan, 1984) tend to exceed those of their U.S. counterparts, but U.S. students language abilities and cultural background allow them to do better research, design experiments, and better communicate about their findings.

From faculty members' perspectives, the primary social difficulties encountered by international students can be linked back to isolation and to segregation into cultural groups. Trice (2010) notes that due to a lack of language skills, international graduate students tend to isolate themselves into first-language friendship groups. Because of limited time, the students do not tend to pursue friendships with native English speakers. Different cultural norms in friendship also lead to this isolation in friendship groups. Graduate international students tend to lack as strong a social network and connection with university advisors, peers, staff, and faculty that their U.S. classmates have (Dong, 1998).

An additional challenge faced by students is a mismatch between graduate students' expectations and that of their advisors and professors. Often, international students expect more direct guidance and influence from advisors (particularly in the case of graduate students) than U.S. professors feel it is their responsibility to give. An additional mismatch is between international students' academic goals and that of their advisors (Belcher, 1994; Jenkins, 2000; Trice, 2005).

Solutions to Helping a Struggling Body of International Students

While researchers have noted many challenges found within the university classroom, they have also noted steps professors and classes designed for international students have taken or should take to aid international students in their classrooms.

A common subcategory noted by several researchers was the need for students to be well versed in genre-specific writing. Many graduate student professors felt that the English for Academic Purpose (EAP) courses or other language-development courses that students took prior to entering their field of study did not adequately prepare them to meet the genre-specific oral and written demands of their programs. Thus, they suggested the importance of students taking English courses, particularly writing courses, within their respective fields of study taught by English language specialists within a particular field (Dong, 1998; Gürel, 2011; Jenkins, Jordan, & Welland, 1993; Trice, 2005).

In a 1984 survey of engineering faculty, Barber and Morgan (1984) discovered that 84% of the professors maintained the same academic expectations for international students as domestic students, and that 97% of them used the same grading criteria for both students. It is interesting to note, however, that in more recent studies (possibly due to the rise in the number of international students), many faculty members have discussed modifications in their instruction or assistance made for international students. For example, in Gürel's study (2011) of graduate students and their dissertation supervisors, he found that the majority of supervisors offered international students additional help with not only the reading of their dissertations but also with the correction of grammar and the teaching of proper writing conventions. Supervisors would often point students to other locations for help when they could not assist them.

With the increase in international students within the classroom, many faculty have begun to make accommodations to aid non-native English speakers within the classroom as

results from Andrade's survey (2009) illustrate. She notes that while faculty do not make courses easier for these students nor do they provide explicit language instruction, they are sensitive to the needs of international students. Robertson et al. (2000) suggest a variety of strategies that can be implemented to help students within the classroom including pairing international and U.S. students, encouraging participation, providing explicit instruction for international students outside of the classroom setting, and allowing for revisions in work.

Sawir (2011) reports that over two-thirds of faculty are making teaching accommodations for their students; however, a great deal more faculty training is needed as the number of international students increase (Robertson et al., 2000). A joint, unified effort needs to be made between departments to better support international students within the classroom. ESL training and training on how to best support international students should be provided for faculty by ESL professionals (Trice, 2005).

While some research has been conducted in the field, major gaps continue to exist because the majority of research has been very limited in scope, conducted primarily with graduate students, and provided little comparison of results across disciplines. Detailed studies need to be implemented in order to determine the best strategies that can be used to help international students adjust academically, personally, and socially to become fully part of the U.S. university system.

As university faculty have reported, oral and written language issues and cultural issues underlie the academic, social, and personal struggles of students. However, faculty, advisors, and university administrators have been working together to address these needs. Further research is needed to address the challenges and successes of the growing undergraduate student body. This

study will attempt to fill these gaps by exploring what faculty in different disciplines have to say about international students.

Methodology

Strategy of Inquiry and Rationale

This research study employed a qualitative methodology examining faculty perspectives of undergraduate international students. “Qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem ... (Creswell, 2009, p. 4) with the ultimate goal of “connecting these meanings to the social world around ...” (Miles, Huberman, & Saldaña, 2014, p. 11). The goal of this study was to explore faculty perspectives of undergraduate international students in order to understand the challenges facing these students with the ultimate goal of helping them function in the U.S. university community. I will examine this topic through exploratory interviews. According to Schensul, Schensul, and LeCompte (1999), the goal of exploratory interviews is “to explore domains believed to be important to the study and about which little is known (p. 121).” Exploratory interviews allow for the in-depth exploration of the complex facets of a social situation such as the U.S. university. The interviews were conducted in a semi-structured manner allowing for “flexibility” combined with “directionality” (Schensul et al., 1999). The directionality enabled me to guide the interviewees toward answering the research question while allowed for flexibility in exploring multiple-facets of the issue.

Setting

The location selected for this study is Rock University¹, a Midwestern public university, containing over 30,000 students and 1,000 tenure and tenure track faculty; international students

¹ Pseudonym used for all names in the study.

(both undergraduate and graduate) comprise 6% of the student body. Over the course of the past five years, the ratio of undergraduate to graduate students has greatly increased; in 2008-2009 school year, undergraduate international students made up 33% of the international student body, but by the 2012-2013 school year the number had jumped to 45%. This site was chosen for this research study due to ease of access and logistics for the researcher. The activities occurring at this research site were in no way be disruptive to classroom culture (Office of International Education, 2013; Regents of the University of Colorado, n.d.).

Participants

Participants within the study were faculty members who had taught undergraduate students, academic advisors, and international program coordinators at the target university. Faculty members included tenured professors, tenure-track professors, instructors, and lecturers; graduate teaching assistants were not included in the study.

This study employed purposeful sampling (Maxwell, 2005; Mcmillan, 1996; Miles et al., 2014) due to the exploratory nature of this qualitative research and the limitations of a single interviewer. McMillan (1996) states, “Based on the researcher’s knowledge of the population, a judgment is made about which cases should be selected to provide the best information to address the purpose of the research” (p. 92). Faculty members from departments containing the highest numbers of international students were purposefully selected for this study. These departments include the school of business, the school of engineering, the sciences, economics, and psychology. Table 1, provided by Rock University’s Office of International Education titled “Undergraduate Students,” details the numbers of international students found in each department in the fall of 2013.

Table 1

Undergraduate Students

Undergraduate Students					
Field of Study	#	Field of Study	#	Field of Study	#
Accounting	20	Dance	2	Linguistics	2
Advertising	1	Ecology & Evolutionary Bio	4	Management	32
Aerospace Engineering Sciences	12	Economics	72	Marketing	24
Applied Mathematics	2	Electrical & Computer Engineering	16	Mathematics	29
Architectural Engineering	26	Electrical Engineering	28	Mechanical Engineering	55
Architecture	2	Engineering- Undetermined	5	Music	1
Art History	1	Engineering Physics	3	News-Editorial/Journalism	1
Asian Studies	1	English	5	Open Option	89
Astronomy	5	Environmental Design	9	Operations Mgmt Info Systems	2
Biochemistry	20	Environmental Engineering	6	Philosophy	2
Biological Sciences	27	Environmental Studies	14	Physics	39
Broadcast News/Journalism	1	Film Studies	4	Piano Performance	1
Broadcast Production	1	Finance	47	Political Science	9
Business	43	Geography	3	Pre-Engineering	24
Chemical & Bio Engineering	3	Geology	10	Psychology	43
Chemical Engineering	72	History	5	Sociology	5
Chemistry	14	Humanities	3	Spanish	2
Civil Engineering	23	Integrative Physiology	10	Speech Language Hearing Sciences	2
Communication	12	International Affairs	17	Studio Arts	6
Computer Science	29	Jour Mass Comm Open Option	7	Theater	3

Due to the limited scope of this exploratory study, only 18 subjects were interviewed.

Professors from the following departments were interviewed: electrical and computer engineering, writing and rhetoric, mechanical engineering (2), accounting, economics, psychology (2), physics, finance, and communications. Additionally, academic advisors from engineering, economics, and the arts and sciences were interviewed; three staff members from the Office of International Education's International Students and Scholars Office were also interviewed.

Role of the Researcher

My experience with international students extends back to the time I was seven, when my parents and I had an Australian exchange student who lived with us. During my later childhood and teenage years, we also had three Russian exchange students and another Australian exchange

student. Through these experiences, other cultures and international students began to fascinate me.

I am a master's student at the university used as the setting for this study. I am studying my master's in educational equity and cultural diversity. I was an international student studying at a Canadian university during my undergraduate degree. While I did not encounter a language barrier as the international students in this study do, I did have to adjust to the academic and cultural climate of a Canadian university.

During the past five years, I have taught at an intensive English program (IEP) of one private university in Canada and at its sister school in China and one U.S. public university. The goal of an IEP is to prepare international students linguistically and culturally for a smooth transition into university. Through my time, I have observed students struggling to prepare for university, and I have heard first hand informal reports about the great challenges they have faced within the classroom. I have also spoken with university professors and informally heard about the challenges they have with international students in their classrooms.

My interactions with international students range from deep familial level-friendships to instructor to being an international student myself. My experiences have left me in both an advantageous but also disadvantageous place for research. The benefit of my experiences is that I have a breadth of perspective on the international student experience; the struggle, however, is that I am also biased in favor of international students and diversity which could skew my interpretations of data.

Human Research Subjects and Confidentiality

Before faculty members were contacted and interviews conducted, I received approval from the University's Institutional Review Board (IRB) to conduct this study. Each faculty and

staff member signed an IRB consent form. All consent forms, interview transcripts, and miscellaneous printed data are being stored in a locked file cabinet in my office. Audio-recordings are coded with a number so as not to reveal personal information and are stored on my passworded personal computer. Audio recordings will be used only for research purposes.

Interview Protocol Development

The theoretical foundation that I provided within the conceptual framework suggests that international students' abilities to succeed in a new sociocultural environment, the U.S. university class, are based upon their ability to successfully integrate into this community of practice. Linguistic, sociocultural, academic, and cognitive dimensions affect their ability to succeed. Thus, interview questions explored the issues contributing to their inability to successfully integrate.

Interview questions with faculty explored the interviewees' overall experiences with international students, their opinions of international student success, and their views of the linguistic, academic, personal, and cultural struggles facing the students that could contribute to students' inability to function in the U.S. university classroom. It subsequently explored faculty opinions on further linguistic, cultural, and academic training international students need to succeed as well as further training that would benefit faculty.

The interview protocol designed for advisors addressed the overarching campus perspective of international student adjustment. It considered advisors' views of faculty perspectives of the linguistic, academic, personal, and cultural struggles of international students and the factors contributing to their success. It explored the current status of international students and international student programming on the campus, and their recommendations for

the university and for international students to improve the undergraduate international student experience on campus. Both interview protocols can be found in Appendix A.

Data Collection

Data was collected during February and March of 2014. Primary data was collected through exploratory, semi-structured interviews with the faculty and staff members. Interviews were scheduled in the following manner. Initial contacts with faculty members and advisors were made through personal staff, faculty, and student contacts I have through my job as a faculty member at the university's language training institute. These initial contacts suggested additional contacts. After the initial personal contacts were made, I perceived a dearth in the number of respondents, so I broadened those contacted. I emailed faculty from several key departments across campus containing high numbers of international students including business, economics, physics, and engineering; faculty members' emails were found on the university's website.

Interviews were conducted in the interviewee's offices and ranged in duration from twenty minutes to an hour. A total of 16 interviews were conducted. During the collection of data, I conducted 16 interviews with a total of 18 participants. While all interviews were coded based on the same process, the interview with two program coordinators from the International Student and Scholar Services (ISSS) spoke about the programs under development at the university. Thus only 15 of the interviews yielded results reported in the struggles section, the success section, and the recommendations section. Within the 15 interviews, I spoke with five advisors (two economics advisors simultaneously) and 11 faculty members for a total of 16 people.

Secondary data collected for validation and comparison purposes was primarily gathered through documents provided by the interviewees. These data include the international student

orientation schedule, a university report conducted in Fall of 2012 on the status of international students at the university, and a qualitative research study conducted in an undergraduate university course on international students from the perspective of international students, domestic students, and the university administration.

Recording and Data Management

During the interview process, I took extensive handwritten notes to capture all that the interviewee disclosed. Information gained from faculty members was primary information. Information gained from advisors was often anecdotal, second-hand information from their interactions with university faculty, students, and administration. Within 24 hours of the interview, I fleshed out the notes and typed them up on the computer. Some interviewees agreed to have the interview audio-recorded. In such a cases, key sections of the audio-recordings were transcribed verbatim.

Data Analysis

After interview notes were recorded, I developed the following coding system based on an exhaustive review of the data. Interview data was coded based on the color-coding system outlined below. For the sake of time, I was the only interviewer and coder. During the first round of data-coding, the initial three-color coding system provided in Table 2 were used based on the interview questions provided.

Table 2

Initial Coding System

Color Code	Domain	Definition	Informant
Orchid	Perspectives of Student Struggles	Opinions and narratives explaining faculty perspectives of the linguistic, academic, personal, cultural, and social struggles of undergraduate international students.	Faculty Advisors

Forest Green	Perspectives of Student Success Factors	Opinions and narratives explaining faculty perspectives of the indicators of success of undergraduate international students.	Faculty Advisors
Mauvelous	Recommendations	Opinions and narratives outlining recommendations for how to improve the success of undergraduate international students.	Faculty Advisors

After an initial coding of the data, I noted the following more specific categories for two larger domains: perspectives of student struggles and recommendations as shown in Table 3.

Table 3

Coding System for Specified Categories

Color Code	Category	Definition	Informant
Carnation Pink	Perspectives of Student Struggles - Linguistic	Opinions and narratives explaining faculty perspectives of the language struggles of undergraduate international students.	Faculty Advisors
Steel Blue	Perspectives of Student Struggles - Academic	Opinions and narratives explaining faculty perspectives of the academic struggles of undergraduate international students.	Faculty Advisors
Burnt Sienna	Perspectives of Student Struggles – Personal	Opinions and narratives explaining faculty perspectives of the personal struggles of undergraduate international students unrelated to language or academics.	Faculty Advisors
Sea Green	Perspectives of Student Struggles - Cultural	Opinions and narratives explaining faculty perspectives of the cultural differences and struggles between undergraduate international students’ cultures and US university culture.	Faculty Advisors
Royal Purple	Perspectives of Student Struggles - Social	Opinions and narratives explaining faculty perspectives of the social struggles of international students.	Faculty Advisors
Gray	Recommendations for Students	Recommendations given by faculty and advisors about courses, policies, and programming that would improve the success of undergraduate international students.	Faculty Advisors
Cornflower	Recommendations for the Institution	Recommendations given by faculty and advisors about policies and faculty training that would improve the success of undergraduate international students.	Faculty Advisors

During the initial rounds of coding, the following additional, miscellaneous domains, which were unrelated to my research questions, were identified in the interviews and coded using the domains listed in Table 4.

Table 4

Coding System for Miscellaneous Categories

Color Code	Domains	Definition	Informant
Orange	Institutional Problems	Advisor and faculty opinions about institutional problems surrounding the admission of and care for undergraduate international students.	Faculty Advisors
Wild Strawberry	Advisor Perspectives of Faculty	Advisor opinions about faculty.	Advisors
Goldenrod	Help in Place	Faculty and advisor identification of the teaching strategies, policies, and programming already in place to aid undergraduate international students.	Faculty Advisors
Spring Green	Perspectives on Diversity	Faculty and advisor opinions on the current status of diversity on the university campus	Faculty Advisors

Following the coding of the interview data, I sorted the coded data into its relevant categories for each interviewee creating a list of the specific subcategories found within each category: a) perspectives of student struggles – linguistic; b) perspectives of student struggles – academic; c) perspectives of student struggles – personal; d) perspectives of student struggles – cultural; e) perspectives of student struggles – social; f) perspectives of student success factors; g) recommendations for students; and h) recommendations for the institution. In doing so, I developed a thematic list of struggles and recommendations mentioned. Each subcategory identified by more than one interviewee was assigned a code found in Table 5. It is important to note that while the categories have been established for analysis purposes, they are by no means mutually exclusive. The categories are very interrelated and overlapping.

The following processes were used to ensure validity. Triangulation of the data occurred through the use of multiple sources of data including interviews with both faculty and advisors from a variety of departments; the varied interview data and supplementary documents provided by the interviewees ensured a wide-breadth of perspective. Interview notes, transcriptions, and recordings provided rich data that is “detailed and varied” (Mcmillan, 1996, p. 10). Findings were linked back to prior theory on international student adjustment (Creswell, 2009; Mcmillan, 1996; Miles et al., 2014).

After the color-coded system was applied to the data, I pulled sections of the coded data by color. For instance, I gathered all of the selections of Carnation Pink – the code for “Perspectives of Student Struggles – Linguistics.” I identified subcategories found within each of the selections of data calculating the number of respondents for each subcategory. I subsequently applied the codes to the interview transcripts, and I documented the results of the second round of coding noting in Excel the number of respondents for each subcategory. I compared the initial coding of the sub-categories and the subsequent coding. I resolved discrepancies found between the first and second round of sub-category coding. Using the results from the analysis, I created a finalized list of codes found in Table 5. A list of the codes, sub-categories, code definitions, an example from the interview data, and a list of informants can be found in Appendix B.

Table 5

Thematic Codes, Definitions, Examples, and Informants

Code	Sub-Category
Perspectives of Student Struggles – Linguistics	
LING 1	Listening comprehension
LING 2	Exams/assignment/instruction comprehension
LING 3	Oral communication
LING 4	Writing
LING 5	Vocabulary
LING 6	Grammar and mechanics

LING 7	General language
LING 8	Negative results
Perspectives of Student Struggles – Academics	
ACAD 1	New concepts and vocab
ACAD 2	Cheating
ACAD 3	Honor code violations
ACAD 4	Class participation
ACAD 5	Types of assignments
ACAD 6	Failure to recognize/use resources
ACAD 7	Manipulation of data
ACAD 8	Hands-on tasks
ACAD 9	Exchange students – fun
Perspectives of Student Struggles – Cultural	
CUL 1	Class participation
CUL 2	Gender
CUL 3	Professor/student relationship
CUL 4	Negotiation
CUL 5	U.S. classroom culture
CUL 6	Asking for help
CUL 7	Cheating, plagiarism, intellectual property
CUL 8	Individualistic culture
CUL 9	Time
CUL 10	Saudi and U.S. divide
Perspectives of Student Struggles – Personal/Social	
PERSO 1	Clustering/pressure to cluster
PERSO 2	Stereotyping and profiling
PERSO 3	Isolation and loneliness
PERSO 4	Family
PERSO 5	Confidence
PERSO 6	Visitors
Perspectives of Student Success Factors	
SUC 1	Seek help and resources
SUC 2	Cross-cultural relationships
SUC 3	Strong language skills
SUC 4	Autonomous
SUC 5	Well-connected
SUC 6	Participation
SUC 7	Hard work and engagement
SUC 8	Acceptance of being different
SUC 9	U.S. background knowledge
SUC 10	Extroversion
Recommendations for Students	
RECS 1	U.S. culture training
RECS 2	First year orientation course
RECS 3	Peer support
RECS 4	Clear faculty expectations
RECS 5	Support activities
RECS 6	Well-connected students
RECS 7	Language courses
RECS 8	Extended orientation

RECS 9	Readily available resources
Recommendations for the Institution	
RECI 1	Increased language skills/requirements
RECI 2	Campus conversations and collaboration
RECI 3	Cross-cultural training/awareness
RECI 4	Training for domestic students
RECI 5	Clarity of accommodations

A full list explaining the abbreviations for the informants can be found in Appendix C. Subcategories mentioned by only one informant can be found in Appendix D. In cases in which a subcategory was noted for a particular ethnic group of students such as European students, the subcategory was included in the tally provided in Appendix B. See Appendix E for full details on the struggles identified for specific ethnic students groups as well as a discussion of patterns noticed within this data. While the majority of identified data fell under linguistic, social, cultural, academic, and personal struggles, faculty and advisors noted two cases of student academic success: quantitative strength and strength of ideas. Neither of these factors fell under a particular code, but the informants for these two factors can be found in Appendix F.

After I applied the coding system to the interview data, I created an Excel spreadsheet noting the interviewees mentioning each sub-category. I calculated the total number of informants for each sub-category. This allowed me to identify which sub-categories were more commonly identified by faculty and advisors. I also tallied the total number of advisors and the total number of faculty members to compare those sub-categories mentioned by each. This additional step of comparison was important because faculty have the first hand experience that advisors do not have. The categories were very similar among advisors who were probably talking among themselves. It also allowed for analysis if they had a different perspectives based on their role in the academic student adjustment.

After I applied the detailed-coding system to the interview data, I applied the color-coding system to the supplementary data identifying categories mutually shared between the interview data and supplementary data.

Findings

During the data analysis phase, I calculated the total number of informants for each sub-category as well as the number of advisors and the number of faculty for each sub-category. I compared this information to the results found in the supplementary data. The results from the interviews and the supplementary data are explained in this section.

Interview Findings

Perspectives of student struggles. Faculty and advisors identified a total of 41 struggles that undergraduate international students face. Of the struggles, eight were linguistic, 13 were academic, 13 were cultural, and seven were personal.

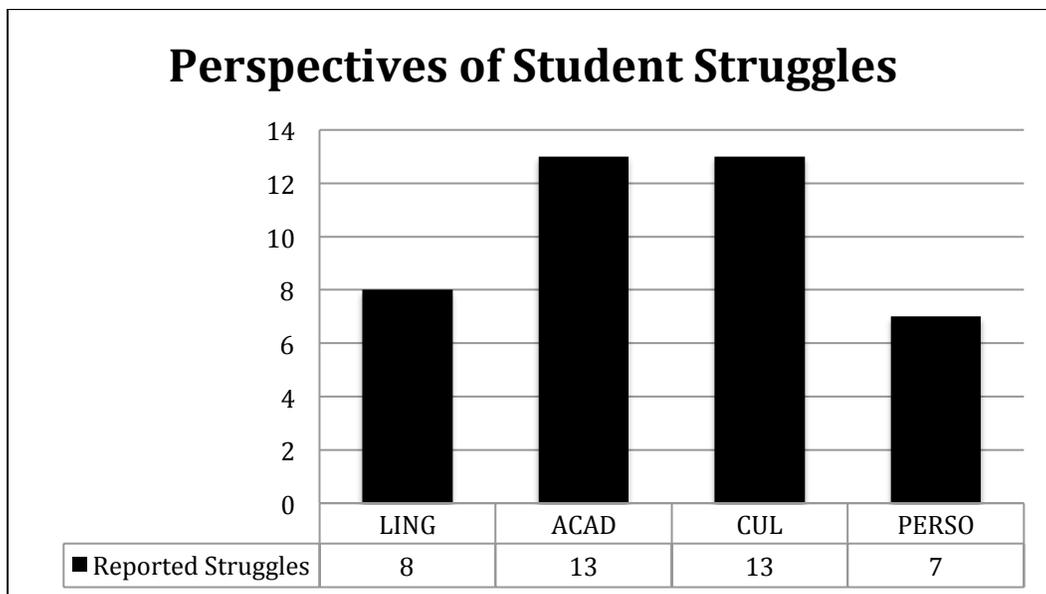


Figure 3. Perspectives of student struggles.

Figure 3 lists the number of reported struggles found in each category including those subcategories only mentioned by one informant. The subsequent sections will report on those

struggles identified by two or more faculty members. A detailed list of the additional struggles mentioned by only one interviewee can be found in Appendix D. As was mentioned during the methodology, it is important to note that the categories have been established for analysis purposes and are interrelated, overlapping, and not mutually exclusive.

Perspectives of student struggles – linguistics. Two or more faculty members and advisors mentioned eight linguistic struggles; they are identified in Figure 4.

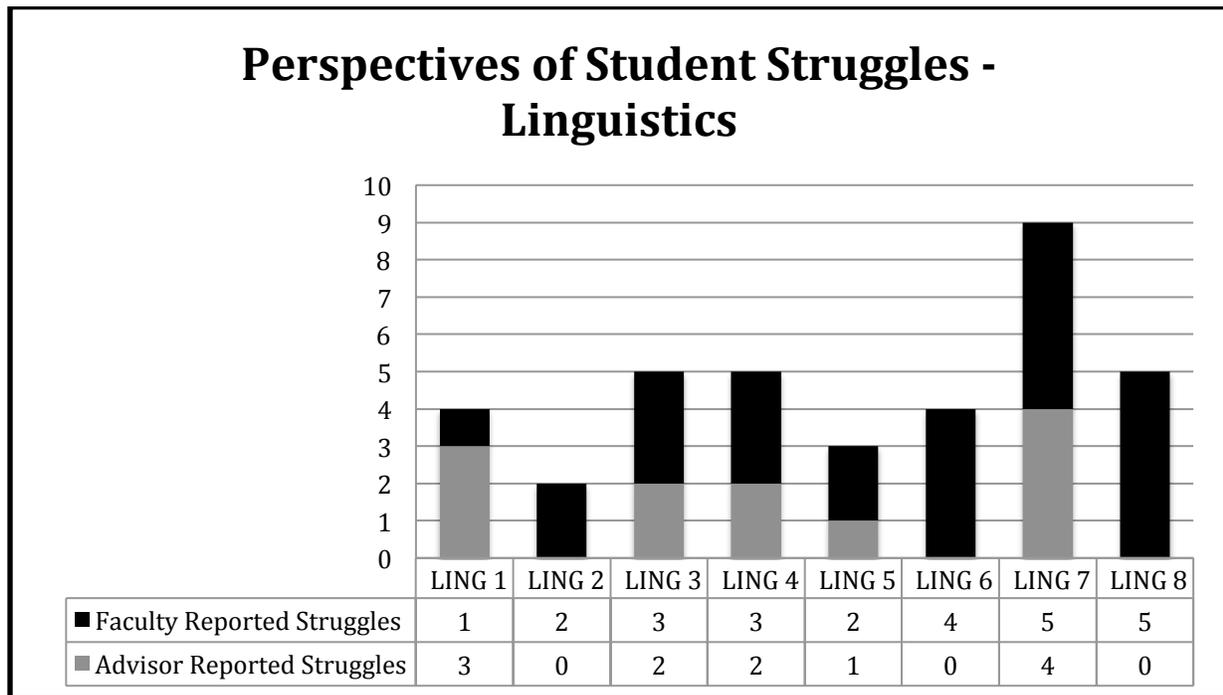


Figure 4. Perspectives of student struggles - linguistics.

Table 6

Codes for Linguistic Struggles

Code	Sub-Category
LING 1	Listening comprehension
LING 2	Exams/assignment/instruction comprehension
LING 3	Oral communication
LING 4	Writing
LING 5	Vocabulary
LING 6	Grammar and mechanics
LING 7	General language

LING 8 Negative results

The struggle reported most often was LING 7 – General Language reported by five faculty members and four advisors. The two struggles noted by the highest number of faculty were LING 7-General language and LING 8-Negative results. The two most common struggles mentioned by advisors were LING 7 – General language and LING 1 – Listening comprehension. Faculty reported LING 6- Grammar and mechanics to be the most common source of specific linguistic difficulty whereas advisors reported it to be LING 1 – Listening comprehension.

Perspectives of student struggles: Culture. Faculty members and advisors reported a total of 13 cultural struggles for students; two or more interviewees mentioned 10 of those. These 10 struggles are identified in Figure 5.

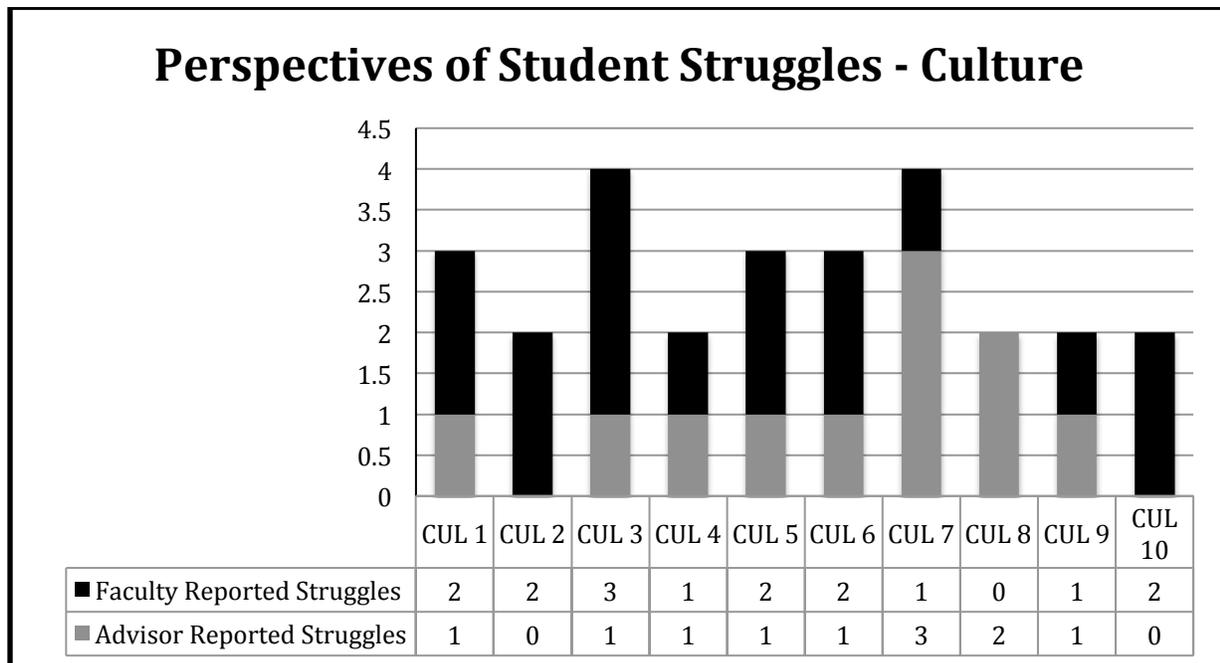


Figure 5. Perspectives of student struggles - cultural.

Table 7

Codes for Cultural Struggles

Code	Sub-Category
CUL 1	Class participation
CUL 2	Gender
CUL 3	Professor/student relationship
CUL 4	Negotiation
CUL 5	U.S. classroom culture
CUL 6	Asking for help
CUL 7	Cheating, plagiarism, intellectual property
CUL 8	Individualistic culture
CUL 9	Time
CUL 10	Saudi and U.S. divide

CUL 3 – Professor/student relationship and CUL 7 – Cheating, plagiarism, and intellectual property were the two most cited cultural struggles for international students, but each was identified by only four out of 15 informants. The highest faculty reported cultural struggle was also CUL 3 – Professor/student relationship; the highest reported by advisors was CUL 7 - Cheating, plagiarism, and intellectual property.

Perspectives of student struggles – academic. Faculty and advisors identified 13 academic struggles that international students face; nine out of the 13 were mentioned in more than one interview. They are listed in detail Figure 6.

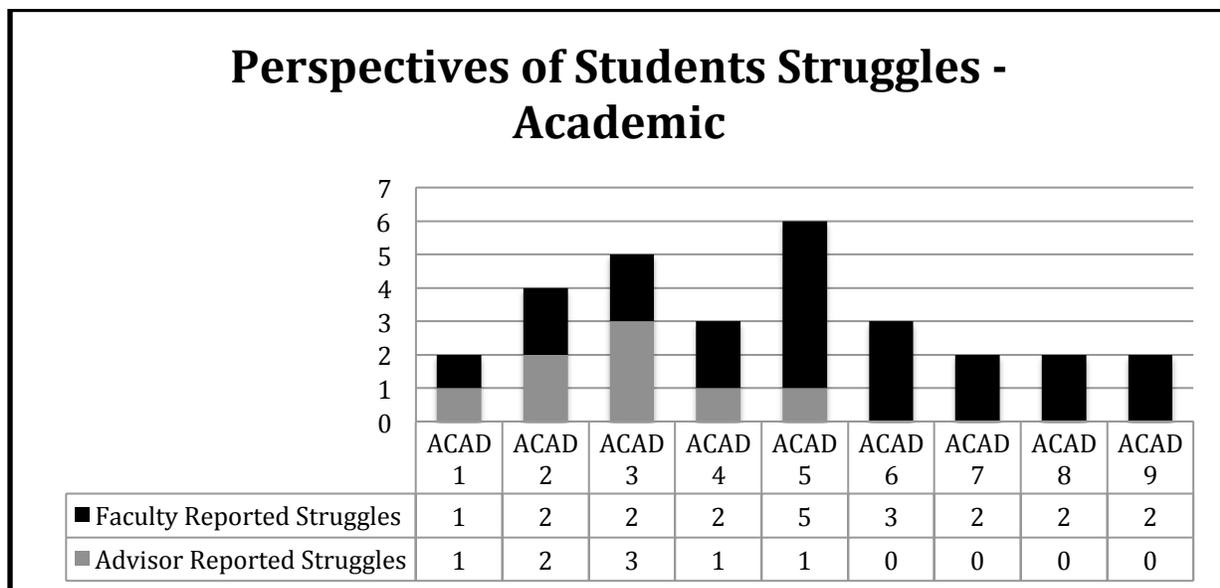


Figure 6. Perspectives of student struggles - academic.

Table 8

Codes for Academic Struggles

Code	Sub-Category
ACAD 1	New concepts and vocab
ACAD 2	Cheating
ACAD 3	Honor code violations
ACAD 4	Class participation
ACAD 5	Types of assignments
ACAD 6	Failure to recognize/use resources
ACAD 7	Manipulation of data
ACAD 8	Hands-on tasks
ACAD 9	Exchange students – fun

ACAD 5 – Types of assignments followed closely by ACAD 3 – Honor code violations were the academic struggles mentioned most often. Five faculty members reported students' misunderstanding of assignments (ACAD 5), and three noted students' failure to recognize and use resources. On the other hand, advisors noted academic struggles less than faculty members. Three advisors noted students' struggles with ACAD 3 – Honor code violations, and two noted students' challenges with cheating.

Perspectives of student struggles –social and personal. Personal and social struggles were the least cited issue. Faculty and advisors noted only six types of personal and social struggles.

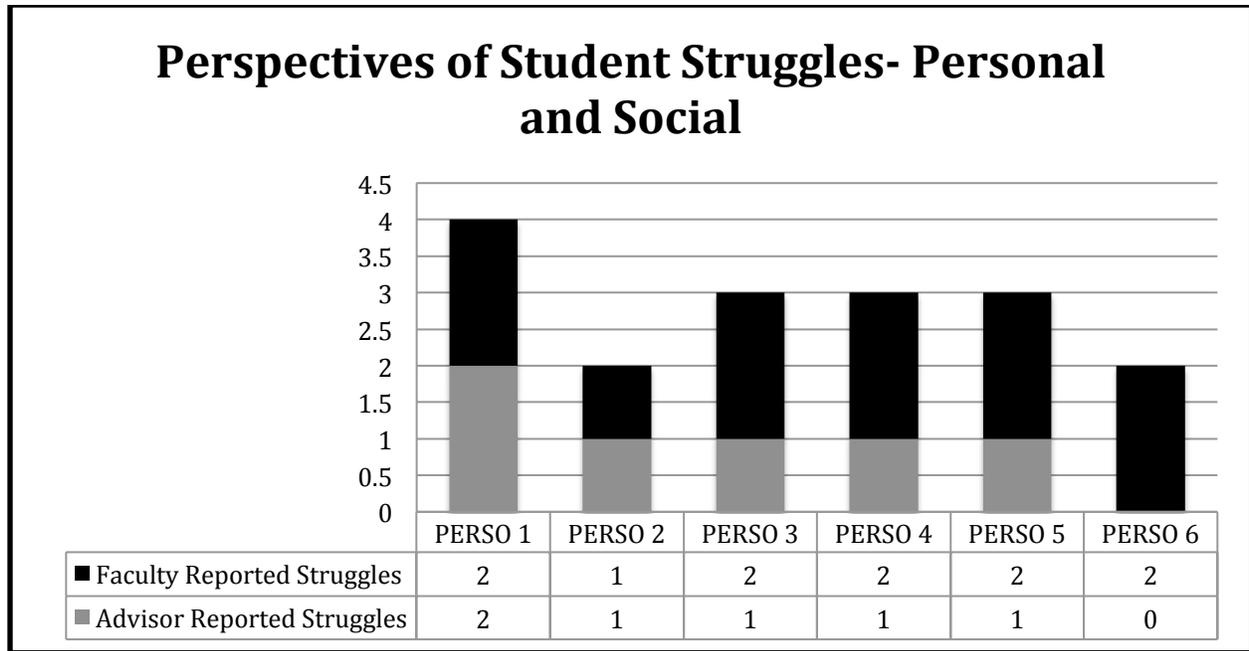


Figure 7. Perspectives of student struggles - personal and social.

Table 9

Codes for Linguistic Struggles

Code	Sub-Category
PERSO 1	Clustering/pressure to cluster
PERSO 2	Stereotyping and profiling
PERSO 3	Isolation and loneliness
PERSO 4	Family
PERSO 5	Confidence
PERSO 6	Visitors

The most common struggle mentioned by both faculty and advisors (although only by two respondents each) was PERSO 1 – Clustering and pressure to cluster. Three other struggles were mentioned by three respondents: PERSO 3- isolation and loneliness, PERSO 4 – family, and PERSO 5 – confidence. No struggles were mentioned by more than two advisors or professors.

Perspectives of student success factors. Faculty members and advisors identified 12 factors influencing international student success. Of the 12 factors mentioned, 10

out of the 12 were mentioned in more than two interviews. Detailed results can be found in Appendix G.

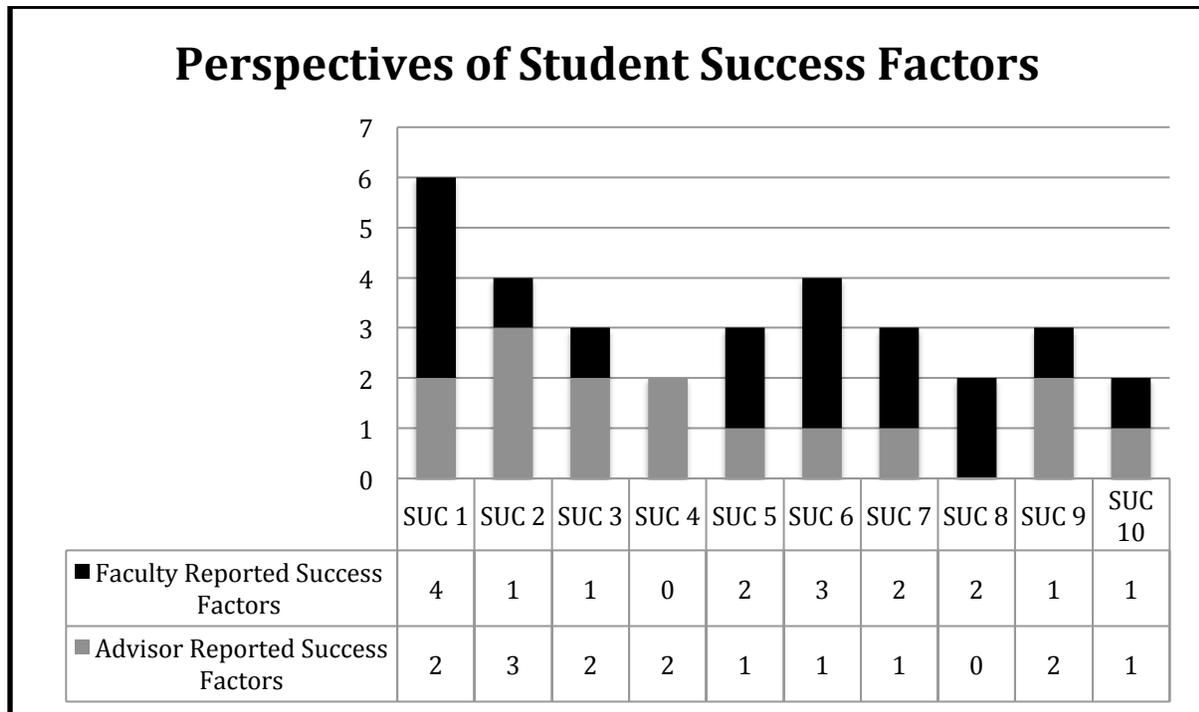


Figure 8. Perspectives of student success factors.

Table 10

Codes of Student Success Factors

Code	Sub-Category
SUC 1	Seek help and resources
SUC 2	Cross-cultural relationships
SUC 3	Strong language skills
SUC 4	Autonomous
SUC 5	Well-connected
SUC 6	Participation
SUC 7	Hard work and engagement
SUC 8	Acceptance of being different
SUC 9	U.S. background knowledge
SUC 10	Extroversion

The factor of international student success, mentioned by six out of 15 respondents, was SUC 1 – Seek help and resources. The two secondary factors were that of cross-cultural friendships (SUC 2) and participation (SUC 6). The factor most commonly identified by faculty members was SUC 1 – Seek help and resources and SUC 6-Participation. Three advisors identified the importance of students having strong language skills (SUC 3).

Interviewee Recommendations. Faculty members and advisors provided 20 recommendations; 10 of the recommendations are for support services for the international students, and 10 are recommendations for the institution (including the administration, university, and domestic students). Of the 10 recommendations for international students, more than one interviewee mentioned 9; however, of the 10 recommended for the institution, only five were noted by more than one person. The number of recommendations is laid out in the Figure 9. A list of the miscellaneous recommendations mentioned by only one faculty or advisor can be found in Appendix H.

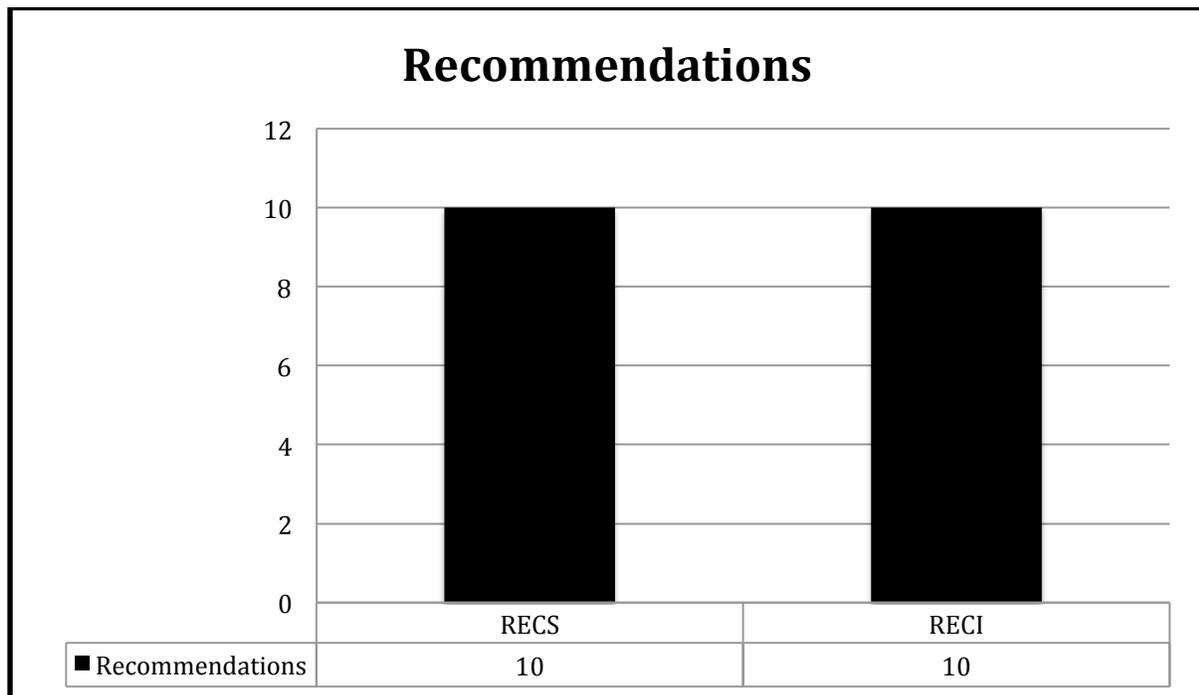


Figure 9. Recommendations for student support services and the institution.

Interviewee recommendations for international students. Of the ten recommendations made by faculty members and advisors, nine were mentioned by at least two people. A detailed report can be found in the Figure 10.

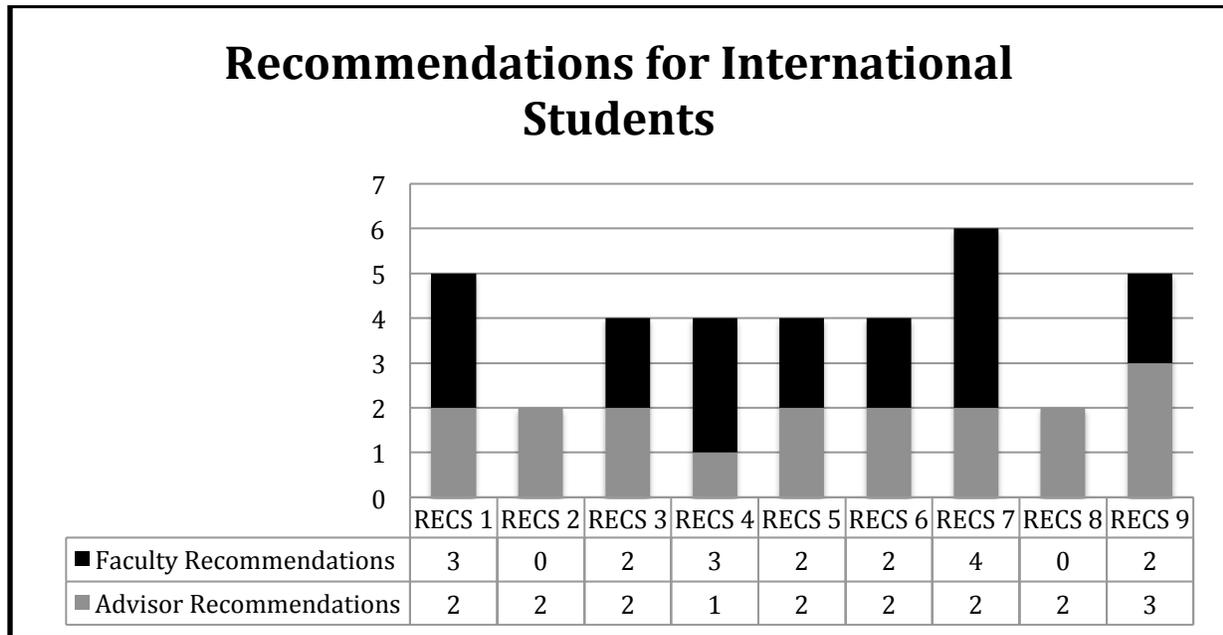


Figure 10. Recommendations for international students.

Table 11

Codes for Recommendations for Students

Code	Sub-Category
RECS 1	U.S. culture training
RECS 2	First year orientation course
RECS 3	Peer support
RECS 4	Clear faculty expectations
RECS 5	Support activities
RECS 6	Well-connected students
RECS 7	Language courses
RECS 8	Extended orientation
RECS 9	Ease of access to resources

Of all of the recommendations provided by faculty, the support service for international students most commonly recommended was RECS 7 – Language courses followed by that of RECS 1- U.S. Culture training and RECS 9 – Ease of access to resources. The recommendation made by the faculty members (four total) is the importance of language courses. For advisors, the most-mentioned recommendation is the importance of Ease of access to resources (REC 9).

Interviewee recommendations for the institution. Of the 10 recommendations made for the institution, only five were made by two or more faculty members and advisors.

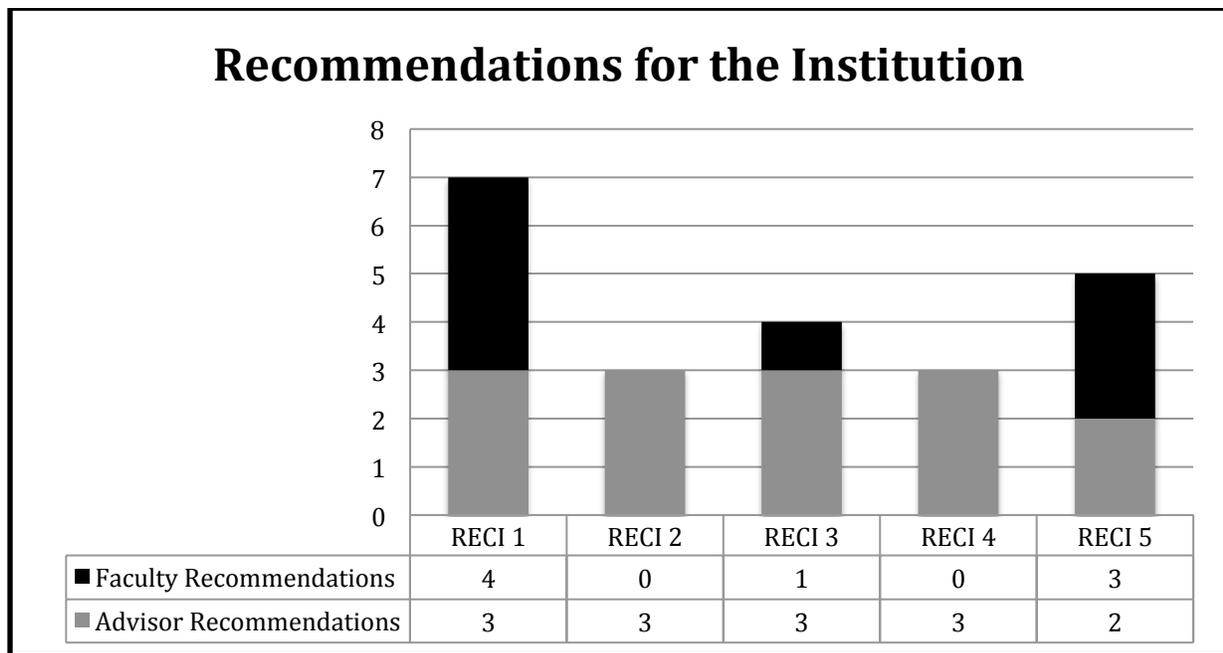


Figure 11. Recommendations for the institution.

Table 11

Codes for Recommendations for the Institution

Code	Sub-Category
RECI 1	Increased language skills/requirements
RECI 2	Campus conversations and collaboration
RECI 3	Cross-cultural training/awareness
RECI 4	Training for domestic students
RECI 5	Clarity of accommodations

Faculty members' and advisor' greatest recommendation is RECI 1 – Increased language skills/requirements (mentioned by seven out of 15 interviewees) followed by RECI 5 - Clarity of accommodations (mentioned by five out of 15 interviewees). The most common recommendation given by faculty is RECI 1 – Increased language skills and requirements. Three advisors each mention RECI 1, RECI 2, RECI 3, and RECI 4 – an interesting point given that RECI 2 and RECI 4 are not mentioned by faculty.

Supplementary Material

The coding system applied to the interview data was also applied to the *Report on International Students' and Scholars'*. While the perspective of the interview data was applied to faculty and advisor perspectives, in this situation, the coding system was applied to a report filed from the perspective of international students, domestic students, and administrators. It yielded the following results.

Information collected from the perspective of international students focused on the reasons for the social distance between international students and U.S. students. The following factors mentioned by international students in this report confirm statements made by faculty:

- Student Struggles
 - Language issues often lead to social distance and isolation.
 - Students often feel stereotyped and judged.
 - International students tend to cluster in language groups. (However, their reasoning was that domestic students do not take initiative to reach out to them and cultural barriers are present.)

- International students are puzzled by U.S. classroom culture including issues such as professor/student relationships, the lack of perceived respect of U.S. students, and the ease of classes.
- Student Recommendations
 - Students need cultural advisors on an ongoing basis throughout the academic year.
 - Students need a better orientation at the beginning of their studies.
 - Students need more off-campus events.

The administration identified two needs matching recommendations from the faculty and advisors.

- There is a need for increased language proficiency requirements for the university.
- There is a need for an intercultural communications course for international students.

In Fall of 2012, a campus group of administrators and staff known as the “I-team” gathered to propose recommendations for the university about what should be considered as the university takes on a more aggressive strategy of recruitment of international students. Four recommendations were made in the I-team Report which address needs identified within the interview data.

1. International students need a unique orientation program.
2. It is time to further develop our [the university’s] services provided to undergraduate international students.
3. Matriculation should include an extended I-student orientation program that requires earlier arrival to campus.

4. All students with iBT TOEFL of <83 should be retested or interviewed upon arrival, and results used to properly place students for their first semester.
5. A Conditional Admission program needs to be approved and ready should Admissions need to utilize it to support our aggressive recruitment targets.
6. Training and support for faculty and staff that facilitates their international with international students should be developed.

According to a follow-up email from the International Student Programs coordinator, each of these problems has been addressed. An extended orientation is being developed to address student needs. A group on campus is readdressing the English language proficiency requirements. Another group is developing a program on cross-cultural communication and training for faculty and students. Honor Code information and presentations have been updated. A Conditional Admission program has been developed to provide language classes for international students lacking sufficient language skills.

The final additional supplementary materials included the following: an orientation schedule from Spring 2014 and a PowerPoint on U.S. Classroom Culture presented to students at that orientation. The following international-student specific topics were addressed at the new student orientation: the university campus, U.S. safety, culture shock, how to succeed in the U.S. classroom and use academic resources, and U.S. healthcare. Information included on U.S. classroom culture included the following subjects: interactive, participatory classroom culture, classroom expectations, classroom cultural tips, how to dress, titles and names for professors, classmate interactions, TA's responsibilities, classroom etiquette, communication with an advisor, and additional campus resources for students.

Discussion

The purpose of this study was to identify the challenges faced by undergraduate international students and to identify the factors contributing to their success in order to offer recommendations for the university as to how to best support the growing international student body. Thomas and Collier (1997) and Herrera et al. (2010) noted that the English language learner is a complex being affected by four dimensions: linguistic, academic, cognitive, and social/cultural. Language learner success hinges on these dimensions.

The international student struggles identified during this study support the findings of literature on graduate student adjustment and the dimensions of learner success noted by Thomas and Collier and Herrera et. al. The coding system used, in fact, reflects this. The broad categories used for student struggles during coding were linguistic, academic, cultural, and social/personal; the dimension left unnoted by faculty and advisors was the cognitive dimension most likely due to the fact that most international students have reached adulthood. Findings from each dimension will be discussed in detail below.

Dimension of Linguistic Struggles

Language struggles, the bane of existence for a large number of international students, were the struggle mentioned by the greatest number of faculty members and advisors. The manifestation of these linguistic struggles varied across informants. For example, a faculty member in psychology noted that the quality of an international student's research was often overshadowed by their inability to present their research clearly due to pronunciation problems. On the other hand, an accounting professor observed international students' strong quantitative abilities that were dwarfed by their inability to comprehend assignments or exam questions. Professors across disciplines (psychology, mechanical engineering, communications, and

economics) noted spending more time working with international student papers due to the grammatical and mechanical issues in their written prose.

Linguistic struggles manifest themselves in different forms in reading, writing, listening, and speaking. The greatest problem comes, however, when these struggles lead to negative consequences as noted by faculty and advisors. A lack of adequate linguistic skills constrains students' cultural adjustment, future educational opportunities, and future job opportunities – to name a few. An accounting professor, for instance, noted that within business, perhaps more so than in other professions, a student's success is determined by his or her ability to participate in a working community. When this student fails to gain sufficient language skills, he or she is likely to struggle with securing a viable place in the business world.

In a similar vein, an engineering professor described the fact that language issues lead international students to isolate into their own little language- and culture-based “learning communities” rather than participating in the learning community at large. As mentioned previously, Vygotsky (1978) in his Sociocultural Theory posited that interaction drives development and learning. Thus, if international student interaction is hindered due to linguistic struggles, their ability to learn is also hindered. In such cases, a student is unable to participate in the learning community or as Lave and Wenger (1991) suggested – a “community of practice.”

One factor of student success noted by faculty and advisors mirrors the noted linguistic struggles. Faculty and advisors both noted the need for students to have strong language skills. Similarly, a recommendation for students and a recommendation for the institution both centered on linguistic abilities. Some faculty and advisors noted the need for the university to increase the language benchmarks for its international students; others suggested that the university should offer/require more language classes to better prepare students for the linguistic rigor of the

university. Whatever the best solution may be, it is apparent that international students need improved language abilities. An academic readiness committee at the university has been formed to reassess the university's language benchmarks and language policies.

Dimensions of Academic and Cultural Struggles

Two psychology professors noted the strength of ideas of international students. A writing and rhetoric faculty member mentioned the high levels of professional writing displayed by Asian students. Professors of economics, finance, accounting, and mechanical engineering noted the quantitative strength of international students. However, according to the international advisor, international students are responsible for double the number of honor code violations as domestic students. According to the arts and sciences advisor, a much higher percentage of international students are on academic probation than domestic students. These statistics indicate a problem that, although greatly impacted by language, must come from other sources. Two such sources identified are the academic and cultural adjustment issues noted by professors and advisors. As was previously noted, these issues hinder international students' ability to participate fully in this "community of practice" which prevents these students from reaching their full development and learning potential. Due to the interrelated nature of the issues identified as academic or cultural struggles, these two dimensions will be discussed together.

Certain characteristics of U.S. classroom culture make it distinct from many educational systems around the world. The U.S. classroom tends to be an interactive, student-centered learning community characterized by participation, an interactive professor/student relationship, a variety of types of assignments, and independent thinking. However, many international students come from a teacher-centered pedagogical background in which the teacher is viewed as an unquestionable authority figure, classroom interaction is very limited, and grades and

assignments are based entirely on one or two exams (Cimasko et al., 2013; Eberly Center for Teaching Excellence, n.d.; Smithee et al., 2004).

During the interview process, the cultural and academic struggles of undergraduate international students noted by faculty members and advisors closely mirror the characteristics of U.S. classroom culture mentioned above and support the findings of the literature on graduate students. Two faculty members from engineering and an advisor from arts and sciences noted an overall lack of understanding of U.S. classroom culture. Professors and advisors also noted specific aspects of classroom culture which international students find challenging.

First of all, faculty and student interactions vary cross-culturally. U.S. faculty-student interaction is based upon the mutual exchange of knowledge; however, two engineering professors and a communications professor as well as an arts and sciences advisor noted the hierarchical view many international students hold of their professor in which s/he is an ultimate, unquestionable authority figure. International students often struggle to ask for help, to question a professor, or to admit their lack of understanding because doing so would be to question a professor's authority. This connects to another cultural struggle of students noted by three faculty members—students' inability to ask for help. Factors of student success identified confirm this very fact. The number one factor of student success noted by faculty and advisors was the need for students to seek help and resources—a fact which is often culturally difficult for them to do. An engineering professor shared a story in which a Chinese student who was newly arrived had very low language skills. He would try to phonetically transcribe all his unknown words. After every class, he would come to meet with the professor for at least twenty minutes to try to figure out content. As the semester went on the student improved and passed. According to this professor, the key to this student's success was that he asked for help.

Many international students come from an exam-based system in which the entire grade of a course rests on the results from one or two exams. However, U.S. professors employ a broad range of assignments including homework, papers, and presentations. An additional academic struggle, which could be interpreted as a cultural struggle and was described by seven faculty members and advisors, is international students' misunderstanding of the types of assignments and expectations of professors. Some students do not understand the language of the assignments, but others perceive the exams as being important yet fail to realize the importance of other assignments.

A cultural and academic struggle mentioned by both faculty and advisors during the interviews was the problem of international students with their understanding of the honor code, plagiarism, cheating, and data manipulation. None of these elements were mentioned in the previous research. The concept of the ownership of ideas, cheating, and plagiarism vary from culture to culture. Thus, international students fail to understand the strict honor code policies in place in the U.S. education system and the cultural intricacies they hold. This misunderstanding is evidenced by the international advisor's statement that international students are responsible for double the honor code violations of domestic students. This advisor shared a story in which a student wrote a critique using some English resources and some Chinese resources. The student failed to cite the Chinese author, and he was accused of plagiarism. When questioned about it during the honor code committee session, the student commented that he knew that he should cite English sources, but he did not realize he should cite Chinese sources because he would not be required to do that in China. The student did not comprehend the need to also cite sources from his own language background. This issue shows just one example of the cultural barriers students are facing.

Faculty and advisors offered four recommendations to meet these cultural and academic needs of students. Their first suggestion was the need for an extended orientation offering pre-arrival training for international students as well as an extended international student-specific orientation. According to the two international student program coordinators, in spring of 2014, the university piloted its first international-student specific extended orientation, and there is discussion about providing pre-arrival training. Issues of U.S. classroom culture and honor code issues were both addressed at this spring orientation.

After international students exit this orientation, unless they are put on academic probation or found guilty of an honor code violation, international students are on their own. While the university's international student services offers support services, international students are not required to use these services. According to the international student advisor, once students leave orientations, it is difficult to "get them back." Consequently, faculty and advisors recommended an on going first year class that would support students in their university adjustment.

While some resources are offered to international students, faculty and advisors felt that the resources were not easily accessible to students noting that students needed for the provided resources to be more explicitly laid out. They also noted the need for faculty expectations to be more clearly laid out for students particularly in the classroom and in course syllabi.

A few academic struggles noted by faculty members and advisors are unique to the undergraduate student experience and have not been noted in previous literature. Contrary to the graduate students, undergraduate students are required to take a selection of core classes found in a variety of disciplines. Many of these core courses require a background in U.S. culture and history, which many international students lack. One factor of international student success noted

by a mechanical engineering faculty member and an economics advisor and arts and sciences advisor is to have such background knowledge.

In addition to the necessity of having U.S. historical and cultural background knowledge, another struggle unique to freshmen is the quantity of new concepts and vocabulary encountered in freshmen classes. According to a professor of engineering and advisors in economics, all freshmen struggle with the quantity of new information they encounter during their first year in a major-class. This is greatly compounded for international students as they wrestle with the quantity of new concepts in addition to the great vocabulary load they are experiencing.

A third academic struggle unique to undergraduate international students is their struggle with hands-on tasks. Two mechanical engineering professors noted that although international students tend to be quantitatively, scientifically, and theoretically strong, they tend to lack the hands-on knowledge and experience that many of their domestic peers have. One of these professors noted students' struggles in a design and fabrication class where at least a rudimentary knowledge of tools is required.

Dimensions of Personal and Social Struggles

Faculty members and advisors noted fewer struggles of personal and social adjustment than those linguistic, cultural, and academic challenges. However, this could be largely due to the fact that faculty members and advisors tend to interact with students on a professional rather than personal level. The most noted social and personal struggle of international students is their tendency to isolate themselves into culture-based and language-based groups; a writing and rhetoric faculty member noted that for Chinese students, for example, this was due to linguistic struggles. A mechanical engineering professor, however, noted that this isolation could also be a result of a great cultural divide between one's home culture and U.S. culture especially for Saudi

Arabian students. Interestingly enough, however, international students offer a different perspective. According to the *Report on International Students' and Scholars'* analyzed in the findings section, an additional reason international students isolate themselves into cultural groups is due to the fact that domestic students fail to reach out to international students. As interviewees noted, it could also be due to feelings of being stereotyped or profiled, insecurity, or feelings of isolation and loneliness. Whatever the reasons for clustering may be, the reality is that clustering, while often a survival tactic for international students, can often lead to a separation from the larger “community of practice.”

Faculty perspectives of the factors of student success and their recommendations support their perspectives of students' personal and social struggles. Faculty noted that the successful international students are those who are independent and extroverted, who are well-connected, who participate in campus activities, and who build cross-cultural relationships. The writing and rhetoric professor labeled these students as the “over-achievers.” A mechanical engineering faculty member summarized it well when she said, “Students need to take the next step. They need to take all that courage that it takes to become an international student and take one extra step to be curious about what's like to or ... what it means to be a U.S. student.”

To bridge the gap between international students and domestic students, faculty and advisors had several recommendations to aid students. They noted the importance of disciplinary and inter-disciplinary peer support suggesting that domestic peer mentors and ambassadors serve as an excellent source of adjustment for isolated students. Faculty and advisors suggested the need for a greater number of campus support activities, trainings, and activities connecting domestic and international students. They also recommended the importance of cultural and

diversity training for not only international students but also for domestic students in order to help them tap into the rich resources international students can offer.

Recommendations for the Institution

While many of the recommendations provided by faculty and advisors were for students, three were made specifically for faculty members. The first was the need for increased campus conversations allowing for collaboration between departments in how to best support international students. However, an international advisor shared the reality that even when faculty and staff are offered the opportunity for such conversations, such as at a brown bag lunch offered by the international students office, faculty rarely attend. Thus, faculty buy in will be necessary for these conversations and trainings to be effective. An economics advisor said, “It takes a village to raise a child.” In other words, in order for international students to successfully thrive in this university community, it will take the work of the entire village – the entire “community of practices.”

A second recommendation for faculty was the need for cross-cultural trainings. The institution needs to offer further faculty training in order to prepare university faculty for the ever-increasing diversity on the university’s campus. An arts and sciences advisor noted the reality that at a tier one research university, faculty members are often unaware of the needs and plights of the typical domestic undergraduate student and even less so of the needs of the international student.

A final recommendation is the need for clarification on the institutional policies on appropriate accommodations that can be offered to international students. Some faculty members cited giving accommodations for international students based on institutional recommendations; others cited their inability to do so based on institutional policy. The university needs to clarify

this policy. An accounting faculty member noted that when students ask for accommodations and become angry when faculty will not give them, professors often “feel like the scapegoat.” He said, “I wish it was off the instructors backs so faculty don’t feel vulnerable.”

Implications

While more research needs to be conducted in order to make the findings of this research generalizable to other institutions, this study does offer important implications for the field of EFL, for the institution in which the study was conducted, and for my own practice.

Implications for the Field of EFL

This study holds several key implications for the field of EFL.

- Educators often view the problems of EFL learners as being purely linguistic offering services to meet their linguistic needs. However, as Thomas’s and Collier’s (1997) Prism Model suggests, learners also struggle with cultural, academic, cognitive, and social issues. This study provided additional evidence to support this fact. Thus, educators need to consider a more holistic approach is supporting learners of EFL.
- Learning requires collaboration on the part of the learner and the instructor who are both part of the same community of practice. Learners must engage in the study of the new language and culture of the situation into which they are walking, but instructors must inform students of their linguistic, academic, personal, and social expectations and that of the community.

Implications for the Institution

This study also holds important implications for the institution at which it was conducted.

- An economics advisors at the university said, “It takes a village to raise a child.” He was suggesting that undergraduate international student success at the university is going to

take collaboration between the administration, faculty, advisors, and students. As the numbers of international students increase, so will the need for more unified front to support students.

- Before collaboration between the faculty, advisors, and administration can truly happen, an awareness of international student struggles must be brought to the forefront. Faculty need training on supporting international students, methods to support EFL learners, clarification of the accommodations or lack-there-of that can be offered to students, and increased access to resources to which they can point their students.
- International students also need increased and on-going linguistic, academic, cultural, personal, and social support throughout their adjustment to the university.

Implications for my Practice

I currently teach at my university's language institute in an intensive English program; our courses prepare students to meet the linguistic (as well as cultural) demands of our university. My research shed light on several important implications for my own practice.

- Often an intensive English program focuses its primary objectives on students' linguistic competencies failing to address other cultural and academic issues which could vary from the students' home culture to the U.S. culture. For example, culture, if taught, is through implicit rather than explicit instruction. Thus, this study highlighted the need for our course objectives to be linguistic, cultural, and academic in nature. Examples of explicit training include issues related to the honor code, U.S. classroom culture, professor/student relationships, and U.S. history. By being offered training in all three areas, students will be better prepared to meet the expectations of faculty.

- Language training institutes often serve as the initial point of entry for many international students, so there should be focused programming to help students adjust personally and socially to life in the U.S. Support that could be offered includes activities partnering domestic and U.S students, activities encouraging and supporting cultural diversity, and activities to introduce students to life in the U.S.
- Language institutes train students in general academic English skills; however, they do not train students in discipline-specific vocabulary. Faculty noted one of the greatest linguistic and academic struggles for students being the quantity of new concepts found in freshmen courses and subsequently, for international students, the great quantity of vocabulary.
- Faculty within my program are trained in supporting EFL students; it is important for us to serve as resources to the university and liaisons between international students and the university, so the university will be better informed about how to support international students.

Limitations of the Study

Although steps were taken to ensure the validity of the study's results, the following limitations are apparent in the study.

- One researcher: I did the research, conducted the interviews, coded the interview data, and made interpretations of the data. Although my advisor guided the process, no one was double-checking the data analysis process. Thus, the research is limited to the interpretation of one researcher.
- Number of participants: The interviews were exploratory in nature and only took into account the opinions of 18 participants. The results of this study were heavily dependent

on faculty and advisors' verbalizations of their perspectives about the struggles and successes of undergraduate international students. However, results were triangulated across the different interview sections and secondary data sources, thus providing the most accurate insight possible.

- One institution: The research was conducted at one institution. Thus, it is not possible to generalize the findings to other institutions and populations of international students.
- Length of time: The interviews were conducted over a two-month period of time. As a result, there was little time to allow for modification of the interview protocol and data analysis.
- Lack of follow-up: Due to time and resource limitations, there was no time for data-checking with the interview participants.

Future Research Issues

Due to the limited and exploratory nature of this study, many potential avenues of research and questions remain. A few of them are described below.

- Because this study was limited to the interviews of professors and advisors, it would be beneficial to conduct a broader comparative research study involving interviews, surveys, and case studies with advisors, faculty, administrators, and students across a broader number of disciplines at more than one university.
- Studies have been conducted on graduate student struggles and successes and undergraduate student struggles and successes, but few to no studies have been done comparing the two. Undergraduate students and graduate students enter university with differing levels of life and academic experience as well as maturity. Thus, it would be

beneficial to organize a comparative study of the differing effects these factors have on international students.

- The struggles and successes of international students have been studied from the perspective of students or in a more limited capacity the opinion of faculty and advisors. However, at large public universities, it is actually the graduate teaching assistants who work more closely and one-on-one with undergraduate students. Thus, it would be interesting to explore the views of graduate teaching assistants on undergraduate international students.
- Little to no distinction was made during this study in describing the issues faced by freshman international students compared with senior international students. However, a great deal of linguistic, cognitive, and cultural development occurs over a four-year period. Thus, it would be beneficial to study incoming international students and graduating international students.

Conclusion

Over the past 50 years, the “irksome problem” of the international student has become a dynamic and growing resource for the university. International students represent the globalization of the current world. International students describe their adjustment struggles as academic, social, and personal issues due to differences between their home culture and the target culture. Faculty perspectives of graduate student struggles parallel those identified for undergraduate students. However, little research exists describing the struggles of undergraduate international students from a faculty perspective. Thus, this exploratory study began to fill the gaps in the literature by discovering the struggles of undergraduate international students from the perspective of university faculty and the solutions to help this struggling student body.

Results from sixteen interviewees confirmed the struggles noted by previous researchers. Interviewees identified the primary struggle of undergraduate international students as students' overall difficulty with language in multiple domains: listening, speaking, reading, and writing. As a result, faculty members and advisors recommended the need for more rigorous language requirements and courses for students. Culturally and academically, international students are struggling to adjust to a new university classroom culture and are navigating unfamiliar pedagogical styles, professor/student relationships, and grading systems. Further orientation and support services would aid in students' adjustment to this new system. Finally, international students struggle personally and socially. Language and cultural struggles often lead international students to isolate in groups with peers from the same language and cultural backgrounds. Both domestic students and international students would benefit from increased opportunities for interaction.

International students bring a wealth of knowledge and diversity to a university. The more a university is able to meet the needs of its struggling international student body, the more its international students will be able to become fully functioning and thriving members of the U.S. higher education system.

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Appendix A: Interview Protocols

Interview Protocol for Faculty

Date:

Place:

Interviewee:

1. **Background:** How many international students do you have in an average class? From what backgrounds are the majority of your international students? What has been your overall experience with the international students in your classes?
2. **Student Success:** How would you define a “successful student” in your class (both domestic and international students)?
3. **International Student Challenges:** In your opinion, what are the greatest challenges to international students success that may not affect domestic students? Please differentiate your answer by specifying the set of challenges experienced by groups of students from particular world regions or cultural backgrounds (e.g., students from Asia, western Europe, Middle East, Latin America, etc.)
(Follow up questions: Are there any challenges related to the students’ linguistic background and their level of English proficiency? Cultural background, academic background? Values and personality traits? Ability to communicate with their professor and domestic classmates?)
4. **Training:** What further training (language, culture, academic, etc.) do international students need before they take your class? What further training does the university need to provide in order to support you and the international students in your classes?

Interview Protocol for Advisors

Date:

Place:

Interviewee:

1. Among administration and faculty members, what is the overall perspective of the undergraduate international students on campus? How do they benefit the campus? What challenges do they bring to the classroom?
2. What are the greatest complaints you receive from faculty about international students in their classes? Please differentiate your answer by specifying the set of

challenges experienced by groups of students from particular world regions or cultural backgrounds (e.g., students from Asia, western Europe, Middle East, Latin America, etc.)

(Follow up questions: Are there any challenges related to the students' linguistic background and their level of English proficiency? Cultural background, academic background? Ability to communicate with their professor and domestic classmates?)

3. (Optional Question) What personality traits and values allow an international student to succeed in your class?
4. What training/orientation/services does your department offer for international students to aid in their transition to university? What training does your department offer faculty in handling international students in their classrooms? What further training would benefit international students?
5. Are there any faculty members within your department who you would recommend contacting to schedule a 15-20 minute interview on the topic?

Appendix B: Codes, Sub-categories, Definitions, Examples, and Informants

Code	Sub-Category	Definition	Example from Interview Data	Informant
Perspectives of Student Struggles – Linguistic				
LING 1	Listening comprehension	Students' inability to understand speech	<i>Students only understand very structured material (Psyc 1).</i>	Psyc 1 Econ Adv A&S Adv Intl Adv
LING 2	Exams/assignment /instruction comprehension	Students' misunderstanding of exam questions, class instructions, and assignment directions	<i>Language causes the greatest struggles for students on the exams (Acc).</i>	Psyc 2 Acc
LING 3	Oral communication	Students' lack of speaking ability	<i>Students from China can be fabulous with honors, but their oral presentation skills are not smooth because of their English (Psyc 2).</i>	Psyc 1 Psyc 2 ME 1 Econ Adv Intl Adv
LING 4	Writing	Students' writing problems	<i>Students have trouble with both oral and written communication (Psyc 2).</i>	Psyc 2 Comm Fin Intl Adv Eng Adv
LING 5	Vocabulary	Students' inability to understand vocabulary (often new, academic vocabulary)	<i>Students have trouble with their ... vocabulary (Econ Adv).</i>	EC Eng Econ Adv Acc
LING 6	Grammar and mechanics	Problems with grammatical and mechanical components of English	<i>The issues with students tend to be the mechanics of language (Econ).</i>	Psyc 2 ME 1 Comm Econ
LING 7	General language	Unspecified language problems	<i>The greatest struggle among international students tends to be the language barrier (Acc).</i>	Psyc 1 ME 2 W&R Econ Econ Adv A&S Adv Intl Adv Eng Adv Acc
LING 8	Negative results	Language issues resulting in academic, social, and personal problems	<i>The honor code problems are probably related to language (Acc).</i>	Psyc 1 Psyc 2 Acc Fin
Perspectives of Student Struggles – Academic				
ACAD 1	New concepts and vocab	The quantity of new concepts and vocabulary found in freshman classes	<i>Words and concepts of freshmen engineering classes are new (EC Eng)</i>	EC Eng Econ Adv
ACAD 2	Cheating	High rates of cheating	<i>Cheating seems to be even</i>	ME 2

		noted in classes (not plagiarism)	<i>more of an issue (Eng Adv).</i>	Acc Intl Adv Eng Adv
ACAD 3	Honor code violations	Problems with plagiarism, cheating, summarizing, and paraphrasing	<i>Many students do not seem to understand how to put something in their own words (EC Eng).</i>	ME 2 EC Eng A&S Adv Intl Adv Eng. Adv.
ACAD 4	Class participation	Lack of class participation	<i>Their group participation depends on personality, but they are not in the top half of pushing their ideas (ME 1).</i>	Pysc 1 ME 1 A&S Adv
ACAD 5	Types of assignments	Lack of knowledge about or misunderstanding of assignments or class expectations	<i>For example, one upperclassman Qatari student completed a short assignment and received an F on it ... He did the wrong thing for the assignment (W&R).</i>	ME 1 ME 2 Acc Fin A&S Adv W&R
ACAD 6	Failure to recognize/use resources	Failure of students to seek out or use available academic resources	<i>The largest issue with international students is that they have a very limited sense of the resources available to help them fair better in classes (Comm).</i>	ME 2 Comm Fin
ACAD 7	Manipulation of data	Inappropriate manipulation of research data to achieve desired results	<i>Students do not know what it means to take their own data and data points. Often they will add data points or massage the data (ME 2).</i>	Psyc 2 ME 2
ACAD 8	Hands-on tasks	Difficulty completing hands-on tasks	<i>International students struggle with hands-on work. Fabrication and design classes are particularly difficult (ME 2).</i>	ME 1 ME 2
ACAD 9	Exchange students – fun	Exchange students are in the U.S. for fun rather than for studying	<i>Degree seeking students have different objectives than exchange students who are often here just to have fun (Acc).</i>	ME 2 Acc
Perspectives of Student Struggles – Cultural				
CUL 1	Class participation	Lack of understanding of participatory nature of U.S. class (whole class/group)	<i>In most economics classes, students attend class. They are spoken to but not engaged in the material (Econ Adv 1).</i>	Psyc 1 ME 1 Econ Adv 1
CUL 2	Gender	Different cultural	<i>Some males do not realize</i>	ME 2

		understanding of gender roles	<i>that the socially acceptable way to treat women in the U.S. is different than in other countries (ME 2).</i>	EC Eng
CUL 3	Professor/student relationship	Lack of cultural knowledge of appropriate interactions between U.S. faculty and students	<i>Authority figures ... students view the professor as a person to whom you cannot address questions (A&S Advisor)</i>	ME 2 EC Eng Comm A&S Adv
CUL 4	Negotiation	Inappropriate negotiation of grades	<i>Sometimes they will do things that faculty deem as inappropriate such as offering too much pushback about grades (ME 2).</i>	ME 2 A&S Adv
CUL 5	U.S. classroom culture	Lack of understanding of elements of U.S. classroom culture	<i>International students are used to a different pedagogy than we are used to. They will see it as a case of the dominating teacher compared to an active-learning classroom (ME 2).</i>	ME 2 EC Eng A&S Adv
CUL 6	Asking for help	Varying cultural views on asking for help	<i>Struggles unique to international students include accepting that asking for help is ok (A&S Adv).</i>	EC Eng A&S Adv Comm
CUL 7	Cheating, plagiarism, intellectual property	Different cultural understandings of cheating, plagiarism, and intellectual property	<i>The difficulty with the honor code is that there are different academic expectations in different cultures (Intl Adv).</i>	ME 2 Econ Adv Intl Adv Eng Adv
CUL 8	Individualistic culture	Disconnect between U.S. individualistic culture and students' collectivist culture	<i>Other countries come from a cooperative culture compared to a U.S. individualist culture (Econ Adv).</i>	Econ Adv A&S Adv
CUL 9	Time	Different cultural views of arriving on time	<i>In the past semester the following issue has come up with Chinese students: lateness, not saying anything when entering the class late (W&R).</i>	W&R A&S Adv
CUL 10	Saudi and U.S. divide	The great cultural differences found between the U.S. and Saudi Arabia	<i>Saudi students have talked about the cultural divide between here and Saudi Arabia because it is so open here and their country is very</i>	ME 1 Econ

				<i>conservative (Econ).</i>
Perspectives of student struggles – personal and social				
PERSO 1	Clustering/pressure to cluster	Students' isolation and clustering into language-based/culture-based groups or feeling the pressure to do so	<i>For students, it is hard for them to break out of their native cultures. There is pressure for them to stay there (Intl Adv).</i>	Physics W&R Econ Adv Intl Adv
PERSO 2	Stereotyping and profiling	Students feeling stereotyped and profiled by faculty and domestic students	<i>Students' concerns are faculty and TAs with stereotypes. Some students feel they are profiled (Intl Adv).</i>	ME 2 Intl Adv
PERSO 3	Isolation and loneliness	Students feeling isolated and lonely	<i>They don't have anyone they can tell ... They have no connection (A&S Advisor).</i>	ME 1 ME 2 A&S Adv
PERSO 4	Family	Students feeling pressure from their families	<i>They experience ... balancing family expectations and culture (A&S Adv)</i>	Psyc 2 ME 2 A&S Adv
PERSO 5	Confidence	Students' lack of confidence, embarrassment, and desire to save face	<i>Chinese students often lack confidence (Psyc 2).</i>	Psyc 1 Psyc 2 A&S Adv
PERSO 6	Visitors	Students constantly feeling like visitors	<i>Foreign students are visitors (Econ).</i>	ME 1 Econ
Perspectives of Student Success Factors				
SUC 1	Seek help and resources	International students actively ask for help from professors, visit office hours, and look for and use their resources	<i>Students have to come forward to ask for help (ME 2).</i>	ME 2 EC Eng Comm Fin Intl Adv Eng Adv
SUC 2	Cross-cultural relationships	International students develop cross-cultural relationships with domestic students and families	<i>Successful students need to the association of a variety of students (Econ Adv).</i>	ME 2 Econ Adv Intl Adv Eng Adv
SUC 3	Strong language skills	International students have strong linguistic skills	<i>What makes students successful? Work on their English (Psyc 2)!</i>	Psyc 2 Econ Adv Intl Adv
SUC 4	Autonomous	International students are independent, proactive, active, and assertive.	<i>Students need to be assertive (Econ Adv).</i>	Econ Adv Intl Adv
SUC 5	Well-connected	International students have a supportive family and friendship group.	<i>Successful students live in dorms or have family support here (W&R).</i>	Psyc 1 W&R Econ Adv
SUC 6	Participation	International students participate in campus activities, work on campus, and live in dorms.	<i>Successful students work on campus, become international guides, go to international coffee hour, and attend sporting events (W&R).</i>	ME 2 W&R Econ Intl Adv

SUC 7	Hard work and engagement	International students work hard and are engaged with the materials.	<i>Universal indicators of success in students are those who are hard working ... (Account).</i>	ME 2 Account Econ Adv
SUC 8	Acceptance of being different	International students accept the reality that they are different and people will be curious.	<i>Recognize the fact that you stand out. Accept the reality that other students will be curious (Psyc).</i>	Psyc 1 Comm
SUC 9	U.S. background knowledge	International students have a basic knowledge of U.S. culture and history.	<i>For U.S. context courses, students need a background in U.S. culture (Econ Adv).</i>	ME 2 Econ Adv A&S Adv
SUC 10	Extroversion	International students are outgoing.	<i>Successful students are outgoing (ME 2).</i>	ME 2 Econ Adv
Recommendations for Students				
RECS 1	US culture training	Training for students about US culture (including classroom culture)	<i>Students need cultural training (EC Eng).</i>	ME 2 EC Eng Comm Econ Adv Intl Adv
RECS 2	First year orientation course	A first year course for freshmen students to support them during their first semester of university	<i>Most universities have a University 101 course with separate sections for international students, but that is not the case at Rock University (Intl Adv).</i>	A&S Adv Intl Adv
RECS 3	Peer support	Peer tutors, mentors, and ambassadors to support international students	<i>Students need peer tutors within their discipline who can train them in content vocabulary (EC Eng).</i>	ME 2 EC Eng Econ Adv Eng Adv
RECS 4	Clear faculty expectations	Faculty expectations clearly laid out for students in the syllabus and during class	<i>Faculty should make things very clear and explicit in their syllabi for students (Intl Adv).</i>	Psyc 2 ME 2 Account Intl Adv
RECS 5	Support activities	Campus-organized events to support students including regular check-ins, presentations, and student panels	<i>Provide international students more intentional programs (A&S).</i>	ME 2 EC Eng A&S Adv Eng Adv
RECS 6	Well-connected students	Programs and activities connecting international students with domestic students and families	<i>International students need to be connected with US students (ME 2).</i>	ME 1 ME 2 Econ Adv A&S Adv
RECS 7	Language courses	Language courses (optional or required) to improve students' language	<i>Freshmen should take writing or language institute support classes (Eng Adv).</i>	Psyc 2 EC Eng Comm Econ Econ Adv Eng Adv
RECS 8	Extended orientation	Online pre-arrival orientation and extended	<i>International students need extended orientation</i>	Intl Adv Eng Adv

		orientation upon arrival	<i>(Eng. Adv)</i>	
RECS 9	Ease of access to resources	Resources clearly laid out and available for students	<i>All students need to be able to get significant help when they need it (Eng Adv).</i>	W&R Econ Adv Intl Adv Eng Adv
Recommendations for the Institution				
RECI 1	Increased language skills/requirements	Need for the university to require higher language ability from the students and raise the TOEFL/IELTS required scores.	<i>Make sure students' language is good (Psyc 2).</i>	Psyc 2 Comm W&R Account Econ Adv A&S Adv Eng Adv
RECI 2	Campus conversations and collaboration	Diversity conversations on campus and collaboration between departments about how to best support international students	<i>There is a cross-cultural working group discussing prioritizing initiatives that would increase cross-cultural communication (Eng Adv).</i>	A&S Adv Intl Adv Eng Adv
RECI 3	Cross-cultural training/awareness	Cross-cultural trainings for faculty and faculty trainings about campus resources available to international students	<i>The dream is to provide cross-cultural training for faculty (Intl Adv).</i>	ME 2 Econ Adv Intl Adv Eng Adv
RECI 4	Training for domestic students	Training for domestic students to consider international students and tap into international student resources	<i>International students adjust, but we need to prepare domestic students to consider international students. It has to be a two way street (A&S Adv).</i>	Intl Adv Eng Adv A&S Adv
RECI 5	Clarity of accommodations	Clarification of the accommodations for international students	<i>Students ask for accommodations, but it is perceived as unfair. Faculty feel like the scapegoat. I wish it was off the instructor's backs so faculty don't feel vulnerable (Account).</i>	Comm Account Fin A&S Adv Intl Adv

Appendix C: Abbreviations Key

Abbreviation	Meaning
Psyc 1/2	Psychology 1/2
ME 1/2	Mechanical Engineering 1/2
EC Eng	Electrical Computer Engineering
Comm	Communications
Physics	Physics
W&R	Writing and Rhetoric
Acc	Accounting
Fin	Finance
Econ	Economics
Econ Adv	Economics Advisor
A&S Adv	Arts and Sciences Advisor
Intl Adv	International Advisor
Eng Adv	Engineering Advisor

Appendix D: Struggles Mentioned by One Informant

Faculty/ Advisor	Struggle – Category	Struggle
A&S Adv	Academic	Underprepared academically. No concept of information in majors
	Cultural	Levels of formality
	Social/Personal	Different value systems.
EC Eng	Cultural	Belief that hard work = success and overcoming emotional problems Cultural understandings of psychological help Extremely different cultural backgrounds
Intl Adv	Academic	International students not held to the same academic standards as domestic students
W&R	Academic	Do not take time to complete assignments. Do not consider audience. Do not complete good first drafts.
Comm	Culture	Pressure to build their social and cultural experience.
	Academic	Trouble producing a strong written-argument Difficulty connecting readings and lectures

Appendix E: Ethnic-Group Specific Comments

Background	Faculty/ Advisor	Category	Comment
Asian	A&S	Linguistic	Students cannot follow explanations.
Arab	EC Eng	Linguistic	Hesitant to speak up in class and ask questions.
	Eng Adv	Linguistic	Higher speaking proficiency, lower writing proficiency
	W&R		
European	ME 1	Personal and Social	Here just to have fun
Saudi		Academic	Low experience during high school
	ME 1	Cultural	Very different home cultures which leads to living in a clique outside of engineering.
Chinese	A&S	Linguistic	Prove to be the most challenge due to their language.
	Intl Adv	Linguistic	Questions about reading, speaking, writing proficiency
	Eng Adv	Linguistic	Advisors do not know students' level of understanding because students nod even if they do not understand
	W&R	Personal/Social	Tendency to be culturally bound
		Linguistic	Low English relying on direct translation from Chinese to English
		Academic	Low work levels
			Chinese students tend to have the greatest difficulty.
		Cultural	Lateness
	Psychology	Linguistic	Chinese students lack smooth oral presentation skills.
		Personal and Social	Chinese students tend to be modest and unassuming, but deal with high parental pressure and a lack of confidence.
	Physics	Personal and Social	Chinese students tend to isolate themselves
	ME 1	Cultural	Different leadership style

Appendix F: Cases of Successful Students

Faculty/ Advisor	Category	Comment
Psyc 2	Academic	Have strong ideas.
Accoun	Academic	Quantitatively strong.
Physics	Academic	Strong theoretical and mathematical backgrounds.
Econ	Cultural	Less needy and more polite.
	Academic	Strong mathematics skills.
Econ Adv	Academic	Strong mathematics and science skills.
Psyc 1	Academic	Have strong ideas.
Fin	Academic	Good mathematics skills

Although international students experience many linguistic and academic struggles, in one area it is often noted, they greatly excel. This is the area of mathematics. Multiple professors in multiple departments noted the strong mathematics skills that international students bring. This most often noted in math-heavy fields. A second subcategory to be noted is that both psychology professors mentioned the strength of the ideas of international students. Students just need the language with which to express their ideas.

Appendix G: Success Mentioned by One Informant

Faculty/ Advisor	Comment
Intl Adv	Students who adapt are more likely to succeed.
Eng Adv	Students should show an interest in faculty research.

Appendix H: Recommendations Mentioned by One Informant

Recommendations for Students

Faculty/ Advisor	Comment
EC Eng	Teachers should use clear speech without slang.

Recommendations for the Institution

Faculty/ Advisor	Comment
A&S	Shift the culture of campus.
	Develop an early alert system to flag student problems.
	Campus needs to ask itself if it wants change.
W&R	Teachers should reach out to students.
ME 2	Smaller class sizes